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SESSIONAL PAPERS

VOLUME 9

FIRST SESSION OF THE ELEVENTH PARLIAMENT

OF THE

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CONTENTS OF VOLUME 1.

(This volume is bound in two parts.)

1. Report of the Auditor General for the year ended 31st March, 1908. Presented 21st January, 1909, by Hon. W. Paterson; also 19th February, 1909, by Hon. W. S. Fielding; also 23rd February, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 2.

2. Public Accounts of Canada, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. W. Paterson..*Printed for both distribution and sessional papers.*

3. Estimates of the sums required for the services of Canada for the year ending 31st March, 1910. Presented 1st February, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

4. Estimates of the sums required for the services of Canada for the year ending on the 31st March, 1909. Presented 15th March, 1909, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

4*a*. Further Supplementary Estimates of sums required for the service of Canada for the fiscal year ending 31st March, 1909. Presented 10th May, 1909, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

5. Supplementary Estimates of sums required for the service of Canada, for the fiscal year ending on 31st March, 1910. Presented 10th May, 1909, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

5*a*. Further Supplementary Estimates of sums required for the service of Canada, for the year ending on 31st March, 1910. Presented 18th May, 1909, by Hon. W. S. Fielding.
Printed for both distribution and sessional papers.

6. List of Shareholders in the Chartered Banks of Canada, as on 31st December, 1908. Presented 13th May, 1909, by Hon. F. Oliver.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 3.

7. Report of dividends remaining unpaid, unclaimed balances and unpaid drafts and bills of exchange in Chartered Banks of Canada, for five years and upwards, prior to 31st December, 1908.. .. ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 4.

8. Report of the Superintendent of Insurance for the year ended 31st December, 1908.
Printed for both distribution and sessional papers.

9. Abstract of Statements of Insurance Companies in Canada, for the year ended 31st December, 1908... .. ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 5.

10. Report of the Department of Trade and Commerce, for the fiscal year ended 31st March, 1909. Part I.—Canadian Trade. Presented 27th January, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

10*a*. Report of the Department of Trade and Commerce, Part II, Trade of Foreign Countries and Treaties and Conventions, for the fiscal year ended 31st March, 1908. Presented 5th April, 1909, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 6.

10*b*. Report of the Department of Trade and Commerce, Part III, Subsidized Steamship Service, &c., for the year ended 31st March, 1908. Presented 22nd March, 1909, by Sir Wilfrid Laurier.. .. ..*Printed for both distribution and sessional papers.*

11. Tables of the Trade and Navigation of Canada, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 7.

12. Inland Revenues of Canada. Excise, &c., for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

13. Inspection of Weights, Measures, Gas and Electric Light, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

14. Report on Adulteration of Food, for the fiscal year ended 31st March, 1908. Presented 11th March, 1909, by Hon. W. Templeman.
Printed for both distribution and sessional papers.

15. Report of the Minister of Agriculture, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. S. A. Fisher.
Printed for both distribution and sessional papers.

15*a*. Report of the Dairy and Cold Storage Commissioner, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. S. A. Fisher.

Printed for both distribution and sessional papers.

15*a*. (2) Report of the Veterinary Director General and Live Stock Commissioner, for two years ended 31st March, 1908... ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 8.

16. Report of the Directors and Officers of the Experimental Farms for the year ended 31st March, 1908. Presented 31st March, 1909, by Hon. S. A. Fisher.
Printed for both distribution and sessional papers.

17. Criminal Statistics for the year ended 30th September, 1908.
Printed for both distribution and sessional papers.

18. Return of the Eleventh General Election for the House of Commons of Canada, held on the 26th day of October, 1908... .. .. ..*Printed for both distribution and sessional papers.*

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19. Report of the Minister of Public Works, for the fiscal year ended 31st March, 1908. Presented 3rd February, 1909, by Hon. W. Pugsley.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 10.

19*a*. Georgian Bay Ship Canal. Report upon survey, with plans and estimates of cost, 1908. Presented 22nd January, 1909, by Hon. W. Pugsley.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 11.

20. Report of the Department of Railways and Canals for the fiscal year ended 31st March, 1908. Presented 19th February, 1909, by Hon. G. P. Graham.
Printed for both distribution and sessional papers.

20*a*. Canal Statistics for the season of navigation, 1907.
Printed for both distribution and sessional papers.

20*b*. Railway Statistics of Canada, for the year ended 30th June, 1908. Presented 25th February, 1909, by Hon. G. P. Graham.*Printed for both distribution and sessional papers.*

20*c*. Third Report of the Board of Railway Commissioners for Canada, to 31st March, 1907, for the year ending 31st March, 1908. Presented 29th January, 1909, by Hon. G. P. Graham.. .. ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 12.

21. Report of the Department of Marine and Fisheries (Marine) for 1908. Presented 18th February, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

21*a*. Seventh Report of the Geographic Board of Canada; containing all decisions to 30th June, 1908. Presented 22nd February, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

21*b*. List of Shipping issued by the Department of Marine and Fisheries, being a list of vessels on the registry books of Canada on the 31st December, 1908.
Printed for both distribution and sessional papers.

22. Report of the Department of Marine and Fisheries (Fisheries) for 1908. Presented 9th February, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

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23. Report of the Harbour Commissioners, &c.
Printed for both distribution and sessional papers.

23*a*. Report of the Chairman of the Board of Steamboat Inspection, 1908.
Printed for both distribution and sessional papers.

24. Report of the Postmaster General, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. R. Lemieux.
Printed for both distribution and sessional papers.

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25. Report of the Department of the Interior, for the fiscal year ended 31st March, 1908. Presented 15th February, 1909, by Hon. F. Oliver.
Printed for both distribution and sessional papers.

25*a*. Report of the Chief Astronomer for the fiscal year ending 31st March, 1908. Presented 13th May, 1909, by Hon. F. Oliver.. ..*Printed both for distribution and sessional papers.*

25*b*. Annual Report of the Topographical Surveys Branch, including Report of the Surveyor General of Dominion Lands, 1907-1908 *Printed for both distribution and sessional papers.*

25*c*. Correspondence and papers, including financial statement, relating to Seed Grain Distribution of 1908 in the provinces of Saskatchewan and Alberta. Presented 28th January, 1909, by Hon. F. Oliver.. ..*Printed for both distribution and sessional papers.*

25*d*. Return to an order of the House of Commons, dated 1st March, 1909, showing how many bushels of seed wheat were bought for Saskatchewan and Alberta for the season of 1908, whom it was bought from, at what price, and what grade it was; if the wheat so bought was cleaned for seed; how the wheat so bought was used; who it was sold to, and at what prices; the total loss in connection with the wheat so bought. Presented 15th March, 1909.—*Mr. Sharpe (Lisgar)*.. .. ..*Not printed.*

25*e*. Return to an order of the House of Commons, dated 1st March, 1909, showing how many bushels of English oats were bought for seed in Saskatchewan and Alberta for the season of 1908, and at what prices; the condition the oats were in before or when they were bought; if used for seed or sold; whom they were sold to and in what places; the total loss in connection with the oats bought in England, and any complaints there were about them. Presented 15th March, 1909.—*Mr. Sharpe (Lisgar)*.....*Not printed.*

CONTENTS OF VOLUME 15.

26. Summary Report of the Geological Survey Branch of the Department of Mines, for the calendar year 1908. Presented 3rd May, 1909, by Hon. W. Templeman.
Printed for both distribution and sessional papers.

26*a*. Summary Report of the Mines Branch of the Department of Mines, for the nine months ended 31st December, 1908..*Printed for both distribution and sessional papers.*

27. Report of the Department of Indian Affairs, for the year ended 31st March, 1908. Presented 22nd January, 1909, by Hon. F. Oliver.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 16.

28. Report of the Royal Northwest Mounted Police, 1908. Presented 9th March, 1909, by Sir Wilfrid Laurier.. .. ..*Printed for both distribution and sessional papers.*

29. Report of the Secretary of State of Canada, for the year ended December, 1907, and the first three months of the year 1908 Presented 22nd January, 1909, by Hon. C. Murphy.. .. ..*Printed for both distribution and sessional papers.*

30. Civil Service List of Canada, 1908. Presented 22nd January, 1909, by Hon. C. Murphy.
Printed for both distribution and sessional papers.

31. Report of the Board of Civil Service Examiners, for the year ended 31st December, 1908.
Printed for both distribution and sessional papers.

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32. Annual Report of the Department of Public Printing and Stationery, for the fiscal year ended 31st March, 1908. Presented 7th May, 1909, by Hon. C. Murphy.
Printed for both distribution and sessional papers.

33. Report of the Joint Librarians of Parliament for the year 1908. Presented 21st January, 1909, by the Hon. the Speaker.. .. ..*Printed for sessional papers.*

34. Report of the Minister of Justice as to Penitentiaries of Canada, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. W. Paterson.
Printed for both distribution and sessional papers.

35. Report of the Militia Council, for the fiscal year ended 31st March, 1908. Presented 9th March, 1909, by Sir Frederick Borden.
Printed for both distribution and sessional papers.

35*a*. Memorandum respecting the estimates for Militia and Defence for 1909-10. Presented 9th March, 1909, by Sir Frederick Borden.
Printed for both distribution and sessional papers.

36. Report of the Department of Labour, for the fiscal year ended 31st March, 1908. Presented 21st January, 1909, by Hon. R. Lemieux.
Printed for both distribution and sessional papers.

37. Report upon the Survey of the Georgian Bay Ship Canal, with plans and estimate of cost.. .. ..*See No. 19a.*

38. Report of the Hon. Mr. Justice Cassels, Commissioner appointed to investigate the affairs of the Department of Marine and Fisheries. Presented 22nd January, 1909, by Hon. L. P. Brodeur.. .. ..*Printed for both distribution and sessional papers.*

38*a*. Minute of a Report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 29th March, 1909:—The Committee of the Privy Council have had under consideration a report, herewith, dated 27th March, 1909, from the Minister of Marine and Fisheries, upon the investigation recently held by the Honourable Walter Cassels respecting the statement contained in the Report of the Civil Service Commission reflecting upon the integrity of officials of the Department of Marine and Fisheries and submitting certain recommendations affecting the officials therein named. The Committee, concurring in the said Report and the recommendation therein contained, submit the same for Your Excellency's approval. Presented 30th March, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

39. Report of the Royal Commission appointed to inquire into industrial disputes in the cotton factories of the province of Quebec. Presented 25th January, 1909, by Hon. R. Lemieux.. .. ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 17—*Continued.*

40. Statement of expenditure on account of miscellaneous unforeseen expenses from the 1st April, 1908, to the 20th January, 1909, in accordance with the Appropriation Act of 1908. Presented 26th January, 1909, by Hon. W. Paterson.. .. ..*Not printed.*

41. Statement of superannuations and retiring allowances in the civil service during the year ended 31st December, 1908, showing name, rank, salary, service, allowance and cause of retirement of each pearson superannuated or retired, also whether vacancy filled by promotion or by new appointment, and salary of any new appointee. Presented 26th January, 1909, by Hon. W. Paterson.. .. ..*Not printed.*

42. Statement in pursuance of section 17 of the Civil Service Insurance Act for the year ending 31st March, 1908. Presented 26th January, 1909, by Hon. W. Paterson.
Not printed.

43. Statement of Governor General's Warrants issued since the last session of parliament, on account of the fiscal year 1908-9. Presented 26th January, 1909, by Hon. W. Paterson.. .. ..*Not printed.*

44. Ordinances of the Yukon Territory, passed by the Yukon Council in the year 1908. Presented 27th January, 1909, by Hon. C. Murphy.. .. ..*Not printed.*

45. Third Report of the Board of Railway Commissioners.. .. ..*See No. 20c.*

46. Report of the Commissioners of the Transcontinental Railway, for the year ending 31st March, 1908. Presented 29th January, 1909, by Hon. G. P. Graham.
Printed for both distribution and sessional papers.

46*a*. Return to an order of the House of Commons, dated 15th February, 1909, for a copy of all correspondence between Rothwell, Johnston & Stubbs, lawyers, of Winnipeg, and the government, or the Transcontinental Railway Commissioners respecting their instructions in regard to the purchase of the Winnipeg terminals from Kern & Mathews, and in respect to the legal services rendered by them for the government, and passing of titles of the property, and a copy of the solicitors' bills of costs, charges and correspondence arising therefrom; and of all correspondence between the government and the Railway Commissioners and the vendors, Kern & Mathews, from the commencement of the negotiations; and also showing what steps, if any, were taken towards expropriating the property, or obtaining judicial determination as to the value of the said property. Presented 4th March, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

46*b*. Return to an order of the House of Commons, dated 22nd February, 1909, showing the final estimates on the contract entered into on August 22, 1906, between J. D. McArthur and Smith & Prendible on the National Transcontinental Railway, for work from station 9370 to station 9480; and the contract entered into on 21st November, 1908, between the same parties on the same railway for work from station 9260 to station 9370. Presented 11th March, 1909.—*Mr. Haggart (Winnipeg)*.. .. ..*Not printed.*

46*c*. Report of Collingwood Schreiber, Esquire, chief engineer western division National Transcontinental Railway. Presented 15th March, 1909, by Hon. G. P. Graham.
Not printed.

46*d*. Interim Report of the Commissioners of the Transcontinental Railway, for the nine months ending 31st December, 1908. Presented 15th March, 1909, by Hon. G. P. Graham.. .. ..*Not printed.*

46*e*. Statistics of Dominion Police Constables employed along the line of the Transcontinental Railway during the calendar year 1908. Presented 23rd March, 1909, by Hon. A. B. Aylesworth.. .. ..*Not printed.*

46*f*. Return to an order of the House of Commons, dated 22nd March, 1909, for a copy of all letters, correspondence, statements and writing between the Grand Trunk Pacific Railway Company, or its engineers or agents, and the Commissioners of the Transcontinental Railway, or their engineers or agents, and between the commissioners and their engineers, and between the commissioners and their engineers and agents and the con-

CONTENTS OF VOLUME 17—*Continued.*

tractors or sub-contractors on Districts B and F after mentioned, as to classification or alleged over classification on Districts B and F of the Eastern Division of said railway, and of all estimates, returns, certificates, memoranda, statements or writings, showing classification or over-classification of the cuttings and work on said Districts B and F. Presented 22nd April, 1909.—*Mr. Lennox*.. .. ..*Not printed.*

46*g*. Return to an order of the House of Commons, dated 26th January, 1909, showing the names of all persons appointed to office or employment by the Transcontinental Railway Commission since its creation, showing the county or city from which such person came, the office or employment to which he was appointed, the date of appointment, the salary and allowances attached thereto, the place or district where the work of each employee is done, and the total amount paid each year for all such services up to the end of December, 1908. Presented 22nd April, 1909.—*Mr. Foster*.. .. .. ..*Not printed.*

46*h*. Return to an order of the House of Commons, dated 3rd March, 1909, for a copy of all tenders received for the construction of the following sections of the Eastern Division of the National Transcontinental Railway, together with the itemized schedules of the engineer's estimates of quantities on which the award of contracts was based, the sections referred to being those mentioned in the answer of the Minister of Railways and Canals in the House on the 13th April, 1908, as follows:—

STATEMENT NO. 1.—COMMISSIONERS—EASTERN DIVISION.

Mileage from Moncton.		Description.	No. of One Miles.	Amount of Estimate on which Contracts were let.	Date of	
From	To				Contract.	Completion.
				$ cts.		
0·00	50·00	Moncton to near Chipman	50·00	989,895 90	Mar. 14,'07	Sept. 1,'08
50·00	58 55	Near Chipman easterly 8·55 miles	8·55	289,190 62	Aug 23,'07	Aug, 1,'08
58·55	97·60	Near Chipman westerly to I.C.R. crossing	39·05	767,434 95	Mar. 28,'08	Sept. 1,'10
97·60	164 00	I.C.R. crossing to Mile 164	66·40	1,898,124 21	" 28,'08	" 1,'10
164·00	195·80	Mile 164 to Grand Falls	31·80	1,646,253 65	" 28,'08	" 1,'10
195·80	256·68	Grand Falls to New Brunswick boundary	60·88	1,385,941 09	" 9,'07	" 1,'08
256·68	309 74	N.B. boundary to 150 miles east of Quebec Bridge	5 143·06	2,377,409 60	" 28,'08	" 1,'10
309 74	459·74	From Quebec Bridge 150 miles eastward	8·89	5,011,346 50	" 9,'07	" 1,'09
		Quebec Bridge link (not included in estimate)	1·11			
459 74	509·74	Quebec Bridge westerly 50 miles	50·00	1,489,537 92	May 15,'06	" 1,'07
509 74	609·74	50 miles west Quebec Bridge to 150 miles west	100·00	3,807,719 54	" 15,'06	" 1,'07
609·74	654·74	150 miles west Quebec Bridge to near Waymontachene	45·00	1,691,073 41	Mar. 14,'07	" 1,'08
654·74	656·07	To be included in this contract	1·33			
656·07	877·75	Near Waymontachene to near Harricanaw River	221·68	Not let.		
877·75	1,027·75	Near Harricanaw River to Junction T. & N. O. Ry.	150·00	3,986,901 42	" 14,'07	" 1,'09
1,021·75	1,127·75	Junction T. & N. O. Ry. for 100 miles west.	100·00	3,936,566 00	" 28,'08	" 1,'10
1,027·75	1,171·85	100 miles west of Junction T. & N. O. Ry. to west end of District 'D'	44·10	Not let.		
1,171·85	1,334·35	West end of District 'D' westerly	162·50	"		
1,334·35	1,409·35	From 19½ miles west of Mud River, easterly.	75·00	2,101,499 88	" 28,'08	" 1,'10
1,409·35	1,429·76	" " " to west end of District 'E'	20·41	Not let.		
1,429·76	1,557·80	From westward District 'E' to Lake Superior Junction	128·04	"		
1,557·80	1,804·66	From Lake Superior Junction to west bank of Red River	246·86	13,010,398 92	May 15,'06	" 1,'07

Presented 26th April, 1909.—*Mr. Lennox*.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

46*i*. Return to an order of the House of Commons, dated 3rd March, 1909, showing the various quantities of work of each description or class actually executed by the several contractors and certified as correct by the engineers and paid for up to 31st December, 1908, upon the several sections of the Eastern Division of the National Transcontinental Railway, where the sections have not been completed, the various chief engineers' estimates of the quantities of the various class of work remaining to be executed, together with an estimate of the cost of completing the same, based on the contractors' prices attached to each tender. Presented 26th April, 1909.—*Mr. Lennox*..*Not printed.*

46*j*. National Transcontinental Railway. Information in reply to questions by Mr. R. L. Borden, M.P. Presented (Senate) 7th May, 1909, by Hon. Sir Richard Cartwright. *Not printed.*

46*k*. Correspondence and reports relative to complaints as to the manner men employed on the Grand Trunk Pacific Railway construction are treated in the hospital at Prince Rupert; the complaint of non-payment of just claims for wages, &c., on the Prince Rupert section of the said railway. Presented 12th May, 1909, by Hon. R. Lemieux. *Not printed.*

46*l*. Supplementary Return to 46*j*. Presented 14th May, 1909.. .. ..*Not printed.*

46*m*. Supplementary Return to No. 46*h*. Presented 14th May, 1909.. .. ..*Not printed.*

47. Return to an address of the House of Commons, dated 25th January, 1909, for a copy of all orders in council, correspondence, reports and other documents and papers, not already brought down, touching or relating to the All-Red Line, so-called, as referred to in the resolution passed by this House on the 9th day of July, 1908, or touching or relating to any similar or substituted proposal for the like purpose. Presented 29th January, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

48. General rules and orders in the Exchequer Court in Canada, 1909. Presented 29th January, 1909, by Hon. C. Murphy.. .. ..*Not printed.*

49. Classification of the following departments of the inside Civil Service at Ottawa, by order in council of the 25th January, 1909, as on the 1st September, 1908, viz.:—Agriculture, Auditor General, Customs, Finance, Superintendent of Insurance, Governor General's Secretary, Indian Affairs, Inland Revenue, Justice, Labour, Library of Parliament, Marine and Fisheries, Militia and Defence, Mines, Post Office, Privy Council, Public Printing and Stationery, Public Works, Railways and Canals, Royal Northwest Mounted Police, Secretary of State, Trade and Commerce. Presented 1st February, 1909, by Sir Wilfrid Laurier.. .. ..*Not printed.*

49*a*. Classification of the officers, clerks and employees of the Library of Parliament, as on the first day of September, 1908. Presented 11th March, 1909, by Sir Wilfrid Laurier. *Not printed*

49*b*. Classification and organization of the officers and clerks of the Distribution Office of the Department of the Printing of Parliament, as on the first day of September, 1908. Presented 11th March, 1909, by Sir Wilfrid Laurier.. .. ..*Not printed.*

49*c*. Classification of the permanent officers, clerks and employees of the House of Commons. Presented 11th March, 1909, by the Hon. the Speaker.. .. ..*Not printed.*

49*d*. Organization of the Staff of the House of Commons, with the classification of the various officers, clerks and employees. Presented 11th March, 1909, by the Hon. the Speaker.. .. ..*Not printed*

CONTENTS OF VOLUME 17—*Continued.*

49*e*. Classification of the Department of the Interior (Inside Service) at Ottawa, by order in council of the 1st February, 1909, as on the 1st September, 1908. Presented 1st April, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

49*f*. Order in Council approved by His Excellency the Governor General on the 5th May, 1908, granting authority for the continued employment of certain officers and clerks of the non-permanent branches of the Department of Public Works. Presented 5th April, 1909, by Hon. W. Pugsley.. .. ..*Not printed.*

49*g*. Schedules in connection with the Civil Service Bill. Presented 10th May, 1909, by Hon. S. A. Fisher.. .. ..*Not printed.*

50. Correspondence, &c., relative to the construction of a subway near the Kingston Junction of the Grand Trunk Railway of Canada. Presented 1st February, 1909, by Hon. G. P. Graham.. .. ..*Not printed.*

51. Copy of official communication, addressed by the Minister of Marine and Fisheries, to Commissioner Cassels, respecting the abolition of the patronage system in the Department of Marine and Fisheries. Presented 1st February, 1909.—*Mr. Foster.Not printed.*

52. Minutes of proceedings of the Board of Internal Economy of the House of Commons, pursuant to Rule of the House No. 9, from the 16th December, 1907, to 14th July, 1908, inclusive. Presented 29th January, 1909, by the Hon. the Speaker.. .. ..*Not printed.*

53. Return to an order of the House of Commons, dated 10th February, 1908, showing the number of applications for the release of prisoners and the number granted since the year 1896 by the Minister of Justice before the expiry of sentence, the terms of sentence, the date of release, the reasons therefor as far as expedient, and the name of the solicitor who was interested in procuring the release. Presented 2nd February, 1909.—*Mr. Foster*.. .. ..*Not printed.*

54. Report of the Commissioner, Dominion Police Force, for the year 1908. Presented 2nd February, 1909, by Hon. A. B. Aylesworth.. .. ..*Not printed.*

55. A detailed statement of all bonds or securities registered in the Department of the Secretary of State of Canada since last return, 7th December, 1907, submitted to the Parliament of Canada under section 32, of chapter 19, of the Revised Statutes of Canada, 1906. Presented 2nd February, 1909, by Hon. C. Murphy.. .. .. ..*Not printed.*

56. Return under chapter 125 (R.S.C.), 1906, intituled: 'An Act respecting Trades Unions,' submitted to Parliament in accordance with section 33 of the said Act. Presented 2nd February, 1909, by Hon. C. Murphy.. .. ..*Not printed.*

57. Report of the Ottawa Improvement Commission for the nine months ended the 31st March, 1908. Presented 4th February, 1909, by Hon. W. Paterson.. .. ..*Not printed.*

58. Partial Return to an order of the House of Commons, dated 1st February, 1909, showing what persons have been appointed, transferred, or promoted, respectively, since 1st July, 1908, in the various departments coming under the operation of the Civil Service Act of 1908; the positions and salaries of such persons as have been transferred and promoted at the time of the change; the positions and salaries at present of all who have been so appointed, transferred or promoted, and which of these appointments, transfers or promotions were made in accordance with the present Civil Service Act. Presented 5th February, 1909.—*Mr. Foster*.. .. ..*Not printed.*

58*a*. Partial Return to an address of the House of Commons, dated 1st February, 1909, for a copy of all orders in council, departmental orders, rules and regulations, and schemes of reorganization adopted in the several departments, rules and regulations

CONTENTS OF VOLUME 17—*Continued.*

made by the Civil Service Commissioners, and all other orders, steps and proceedings made, had or taken under or pursuant to the Civil Service Amendment Act, 1908. Presented 8th February, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

58*b*. Supplementary Return to No. 58. Presented 8th February, 1909... .. ..*Not printed.*

58*c*. Return to an order of the House of Commons, dated 10th February, 1909, showing how many officials were appointed in the year 1908 to the various departments and brought from the outside service into the inside service under the Civil Service Act, with their names and salaries; and what addition to the various staffs have been made thereby. Presented 11th February, 1909.—*Mr. Sharpe (Ontario)*.. .. ..*Not printed.*

58*d*. Further Supplementary Return to No. 58. Presented 11th February, 1909..*Not printed.*

58*e*. Return to an order of the House of Commons, dated 2nd February, 1909, showing the names of the temporary clerks formerly paid out of Civil Government Contingencies who have been classified under section 7 of the Civil Service Act since the 1st September, 1908, and placed in the third division subdivision B; the position filled by each at the time of classification and the salary paid, the length of service, the age and what examination has been passed; the position to which assigned under the classification and the salary attached; the names of the persons appointed to the Civil Service since 1st September, 1908, under section 47 of the Civil Service Act, the positions to which appointed, the date of appointment, and the salary attached. Presented 11th February, 1909.—*Mr. Foster*. .. ..*Not printed.*

58*f*. Further Supplementary Return to No. 58. Presented 18th February, 1909.*Not printed.*

58*g*. Return to an address of the House of Commons, dated 15th February, 1909, for copies of orders in council by authority of which increases of salary detailed on pages 556, 557, 558, 559, 560, 561, 562, 563 and 564, unrevised *Hansard*, 1909, were granted. Presented 23rd February, 1909.—*Mr. Foster*.. .. ..*Not printed.*

58*h*. Return to an order of the House of Commons, dated 15th February, 1909, showing the name and date of the first appointment, position and salary at time of increase of each clerk or other employee in the outside service of the Department of Public Works at Ottawa, to whom any increase of pay was given on and after the 1st of April, 1908, the amount of such increase or increases, the date on which increase was granted, the date it became effective, and the date on which the increase was paid. 2. A similar return from each of the following Departments: Militia and Defence, Marine and Fisheries, Railways and Canals, Customs, Inland Revenue, Public Printing, Indian Affairs, Auditor General, Finance, Mines and Post Office Department. Presented 23rd February, 1909.—*Mr. Foster*.. .. ..*Not printed.*

58*i*. Return to an address of the House of Commons, dated 15th February, 1909, for copies of orders in council passed from the 1st of May, 1908, to 31st January, 1909, authorizing increases to the employees of the Department of Public Works. Presented 25th February, 1909.—*Mr. Foster*.. .. ..*Not printed.*

58*j*. Orders in Council attached to Sessional Paper No. 58*g* herewith were the only ones passed in connection with the increases of salary detailed on pages 556, 557, 558, 559, 560, 561, 562, 563 and 564, unrevised *Hansard*, 1909. The increases given to the officials employed in the Surveys Branch were granted in accordance with the Act respecting the Department of the Interior, chapter 54, sections 6 and 8, of the Revised Statutes, which relate to the employment and payment of temporary assistants in the Surveyor General's Branch, for the performance of services requiring technical, scientific or professional qualifications. The increases given to the employees on Dominion Lands, Outside Service, School Lands, Immigration and Boundary Surveys were granted under departmental authority. Presented 26th February, 1909, by Hon. F. Oliver.

Not printed.

CONTENTS OF VOLUME 17—*Continued.*

59. Return of orders in council which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, between 1st December, 1907, and 1st December, 1908, in accordance with provisions of subsection (*d*) of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile railway belt in the province of British Columbia. Presented 5th February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

60. Return under the provisions of section 57 of the Northwest Irrigation Act, being chapter 61 of Revised Statutes of Canada, 1906, being copies of all Orders in Council, which have been passed or regulations which have been made or forms prescribed by the Minister of the Interior under that Act, and which have been published in the *Canada Gazette*, since the date of the presentation to Parliament of a similar return at its last preceding session. Presented 5th February, 1909, by Hon. F. Oliver.

Not printed.

61. Return under the provision of section 77 of the Dominion Lands Act, chapter 20, of the Statutes of 1908, of section 5 of the Dominion Lands Surveys Act, chapter 21, of the same Statutes, of subsection 2, of section 13 of the Dominion Forest Reserves Act, chapter 56, R.S.C., 1906, of subsection 3 of section 5 of the Rocky Mountains Park Act, chapter 60, R.S.C., 1906, and of subsection 2 of section 18 of the Yukon Act, chapter 63, R.S.C., 1906, being copies of all orders in council, ordinances or regulations which have been passed under any of the above mentioned Acts and which have been published in the *Canada Gazette*, since the date of the presentation to Parliament of a similar return at its last preceding session. Presented to Parliament of a similar return at its last preceding session. Presented 5th February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

62. Return to an order of the House of Commons, dated 25th January, 1909, for a copy of all correspondence during the last three months with reference to Lachute Mills post office. Presented 8th February, 1909.—*Mr. Perley*.. .. ..*Not printed.*

63. Order in Council, &c., in relation to the issue of $50,000,000 additional stock by the Canadian Pacific Railway Company. Presented 8th February, 1909, by Hon. G. P. Graham.. .. ..*Not printed.*

63*a*. Return (in so far as the Department of the Interior is concerned) of copies of all orders in council, plans, papers, and correspondence which are required to be presented to the House of Commons, under a resolution passed on 20th February, 1882, since the date of the last return under such resolution. Presented 8th February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

63*b*. Correspondence on the subject of the Canadian Pacific Railway Company securing running rights over the Intercolonial Railway between St. John and Halifax. Presented 8th February, 1909, by Hon. G. P. Graham.. .. ..*Not printed.*

63*c*. Return of lands sold by the Canadian Pacific Railway Company, from the 1st October, 1907, to the 1st October, 1908, and the names of the purchasers. Presented 15th February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

63*d*. Return to an address of the House of Commons, dated 8th February, 1909, for a copy of any order in council authorizing the Canadian Pacific Railway to increase its capital stock. Presented 18th February, 1909.—*Mr. Maclean (York)*.. .. ..*Not printed.*

63*e*. Further correspondence on the subject of the Canadian Pacific Railway Company securing running rights over the Intercolonial Railway between St. John and Halifax. Presented 22nd February, 1909, by Hon. G. P. Graham.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

64. Return to an order of the House of Commons, dated 1st February, 1909, showing what sums of money have been paid each of the several holders of stock in the Quebec Bridge Company on account of stock, bonus and interest, respectively; and what amount remains to be paid and to whom. Presented 8th February, 1909.—*Mr. Foster.*
Not printed

65. Return to an order of the House of Commons, dated 1st February, 1909, showing what disposition has been made in detail of the vote of $25,000 under Miscellaneous, for seed grain in Alberta and Saskatchewan. Presented 11th February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

66. Return to an order of the House of Commons, dated 26th January, 1909, showing in detail the assets amounting to $157,483,926.17 in the balance sheet of Canada on 31st December, 1909. Presented 11th February, 1909.—*Mr. Ames.. .. ..Not printed.*

67. Return to an address of the House of Commons, dated 11th February, 1909, for a copy of the report of the commissioners appointed by the government to inquire into, examine and report upon the branch lines of railway connecting with the Intercolonial Railway; also a copy of the report of the commissioners appointed by the government of the province of New Brunswick to inquire into, examine and report upon the branch lines of railway within said province and connecting with the said Intercolonial Railway. Presented 11th February, 1909.—*Mr. Emmerson.*
Printed for both distribution and sessional papers.

67*a*. Return to an order of the House of Commons, dated 1st February, 1909, showing the tenders called for by the Department of Railways and Canals for 144 miles, more or less, of wire fencing during the summer or fall of 1908, and the advertisements or circulars calling for same: how many tenders were received and from whom; how the contract was let, at what price and to whom; the quantity of wire fencing purchased by the Department of Railways and Canals during 1908, by tender or otherwise, and the prices paid per mile. Presented 2nd March, 1909.—*Mr. Taylor (Leeds).. ..Not printed.*

67b. Return to an order of the House of Commons, dated 26th January, 1909, showing, in respect of the following items which appear in the Public Accounts:—

Intercolonial Railway, open account..	$965,418 00
Windsor Branch, open account..	180 34
Prince Edward Island Railway, open account..	19,687 00

(*a*) what proportion of these amounts represents moneys due the government since a date prior to the end of the fiscal year 1906-7; (*b*) what part of the amount thus overdue was incurred in each fiscal year prior to 1906-7; (*c*) a list of the items included in (*a*) which represent an amount exceeding one hundred dollars, with name in each case of debtor, date and nature of services. Presented 4th March, 1909.—*Mr. Ames.*
Not printed.

67*c*. Return to an order of the House of Commons, dated 15th March, 1909, for a copy of the Report of the Conciliation Board in connection with the freight clerks of Halifax and St. John. Presented 23rd March, 1909.—*Mr. Crosby.. .. ..Not printed.*

67*d*. Return to an order of the House of Commons, dated 22nd March, 1909, showing the names of the Intercolonial employees dismissed or suspended during the year 1908, the position held by each, the date of dismissal or suspension, and the special cause alleged therefor; also the names of any such persons so dismissed or suspended who have been reinstated up to 28th February, 1909, and the dates of reinstation. Presented 22nd April, 1909.—*Mr. Foster.. .. ..Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

67*e*. Copy of Order in Council constituting a Board of Management for the Government Railways—the Intercolonial and the Prince Edward Island Railway—and naming the members of the said Board of Management. Presented 26th April, 1909, by Hon. G. P. Graham.. .. .. .

CONTENTS OF VOLUME 17—*Continued.*

71*a*. Return to an order of the House of Commons, dated 1st February, 1909, showing the total cost of the Royal Mint to 31st December, 1908; the total expenses of Royal Mint for the calendar year 1908, (*a*) for additions and improvements, (*b*) for maintenance, (*c*) for salaries, (*d*) for bullion copper, silver and gold, respectively; the amount of copper, silver and gold coinage that was struck during that time; and the net profit on each kind of coinage. Presented 31st March, 1909.—*Mr. Foster*.. .. ..*Not printed.*

72. Return to an order of the House of Commons, dated 25th January, 1909, showing, in detail, the items comprised in the amount $699,235.52, given as miscellaneous revenue for the month of December, 1908. Presented 12th February, 1909.—*Mr. Ames.* *Not printed.*

73. Return to an order of the House of Commons, dated 25th January, 1909, showing all free mail deliveries established or authorized since the 30th of June, 1908, in towns or villages; all free rural mail deliveries established or authorized since said date, the number of persons served by each such free mail delivery in the community or route for which it has been so established and the cost in each instance. Presented 12th February, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

73*a*. Return to an order of the House of Commons, dated 22nd March, 1909, for a copy of all correspondence and memoranda relating to rural mail delivery in the province of Alberta. Presented 17th May, 1909.—*Mr. McCarthy*.. .. ..*Not printed.*

74. General orders issued to the Militia between 28th November, 1907, to 31st January, 1909. Presented 15th February, 1909, by Sir Frederick Borden.. .. ..*Not printed.*

75. Return to an order of the House of Commons, dated 8th February, 1909, in detail showing what disposition has been made of the vote of $35,000 to cover the cost of boring for oil, gas, coal, &c., passed on 15th July, 1908, with a copy of all correspondence, reports, telegrams, memoranda, &c., connected with the matter, giving the district in which the wells were drilled, the cost and present condition of each well, and a copy of all contracts and tenders. Presented 15th February, 1909.—*Mr. Armstrong*..*Not printed.*

76. Return to an order of the House of Commons, dated 25th January, 1909, showing: 1. The number of accidents which occurred at level railway crossings in Canada during the period of five years prior to the 31st of March, 1908. 2. The time where and the places at which these accidents occurred. 3. The alleged cause of the accident in each case. 4. The number of persons killed in each case. 5. The number of persons injured and the nature of the injury in each case. 6. A statement in each case as to whether the crossing was protected or not, and if protected, by what means. Presented 16th February, 1909.—*Mr. Lennox*.. .. ..*Not printed.*

76*a*. Return to an order of the House of Commons, dated 10th February, 1909, showing since the constitution of the Railway Board, in how many cases they have ordered protection of highway-railway crossings, (*a*) by separation of the highway and railway, (*b*) by gates, (*c*) by other means, and the method adopted in each case; how the proceedings were initiated in each case; what order was made as to the expense of the work or service in each; at what points separation of highway and railway was ordered, and the actual or estimated cost in each case; in how many, and what cases applications were refused. Presented 4th March, 1909.—*Mr. Lennox*.. .. ..*Not printed.*

76*b*. Return to an address of the Senate, dated 25th February, 1909, for copies of all requests to the Board of Railway Commissioners by the Minister of Railways, under section 28 of the Railway Act, and also copies of all orders in council made within the last twelve months respecting level crossings by railways over public highways, the dates of making such requests or orders in council to be given. Presented 19th March, 1909.—*Hon. Mr. Ferguson*.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

77. Return to an order of the House of Commons, dated 1st February, 1909, showing all importations of steel bars, steel ingot, rolled iron and steel, steel rails and structural steel, into the Dominion of Canada, by months, since the 31st day of March, 1908, and up to the 31st January, 1909, showing: (*a*) the quantity imported, (*b*) the country from which imported. (*c*) port of entry, (*d*) the value of the imports, and (*e*) the amount of duty paid thereupon. Presented 18th February, 1909.—*Mr. Boyce.*
Not printed.

78. Return to an order of the House of Commons, dated 8th February, 1909, showing the number of seizures made by the Department of Inland Revenue during the years 1904, 1905, 1906, 1907 and 1908; the date of seizures; by whom seized; what the seizures consisted of; amount realized by the sale of such material seized; and how the seized material was disposed of. Presented 18th February, 1909.—*Mr. Barr.. .. ..Not printed.*

78*a*. Return to an order of the House of Commons, dated 10th February, 1909, showing the number of seizures made by the Department of Customs during the years 1904, 1905, 1906, 1907 and 1908; the date of seizures; by whom seized; what the seizures consisted of; the party from whom seized; amount realized by the sale of such material seized; and how the seized material was disposed of. Presented 11th March, 1909.—*Mr. Barr.*
Not printed.

79. Return showing remissions of interest made under subsection 2 of section 88 of the Indian Act, chapter 81, Revised Statutes of Canada, for the year ended 31st March, 1908. Presented 18th February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

80. Return to an order of the House of Commons, dated 3rd February, 1909, showing how many sessional clerks and messengers have been appointed to the House of Commons since 1880; their names and the date of their appointments; if appointed by the Internal Economy Commission or otherwise; how many sessional clerks and messengers have been removed from the House of Commons since 1880; their names and the dates of their removal; if removed by the Internal Economy Commission or otherwise. Presented 19th February, 1909.—*Mr. Paquet.. .. ..Not printed.*

81. Copy of an order in council of the 15th February, 1909, relative to the Second Joint Report of the Commission for the demarcation of the meridian of the 141st degree of west longitude (Alaska Boundary), appointed in virtue of the First Article of the Convention between Great Britain and the United States, signed at Washington on the 21st April, 1906; and also a copy of the said Report. Presented 22nd February, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

82. Return to an order of the House of Commons, dated 3rd February, 1909, showing what precautionary measures were taken by the government to combat the introduction of the foot and mouth disease into Canada from United States; what officials were appointed especially for the work, the dates of appointment, length of service, remuneration paid to each as salary or expenses; the present danger, and when the embargo on live stock from the United States was raised. Presented 22nd February, 1909.—*Mr. Sharpe (Ontario).. .. ..Not printed.*

82*a*. Return to an order of the House of Commons, dated 8th February, 1909, showing what States of the United States have been quarantined by order in council by reason of the prevalence of foot and mouth disease in such States; how many inspectors were appointed by the government to prevent the importation of live stock into Canada from quarantine States; at what points such inspectors were stationed; and what salaries these inspectors were paid. Presented 22nd February, 1909.—*Mr. Chisholm (Huron).. .. ..Not printed.*

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CONTENTS OF VOLUME 17—*Continued.*

83. Return to an order of the House of Commons, dated 10th February, 1909, showing the quantity of summer-caught white fish, and the value, the pickerel, quantity and value, the sturgeon, quantity and value, exported to the United States for each year, respectively, during the years from November 1893 to November, 1908, from the Manitoba ports. Presented 23rd February, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

84. Return to an order of the House of Commons, dated 8th February, 1909, showing, in detail, all moneys received by this government from the sale of land, forest, mines, fisheries and other natural resources of the province of Alberta for the last fiscal year. Presented 23rd February, 1909.—*Mr. McCarthy*.. .. ..*Not printed.*

85. Return to an order of the eHouse of Commons, dated 17th February, 1909, showing from whom the wood-working machinery was purchased for Intercolonial Railway shops at Moncton or elsewhere since 1st January, 1908, how much from each and the prices paid; from whom the iron-working machinery was purchased for the Intercolonial Railway shops at Moncton, or elsewhere, since 1st January, 1908, how much from each, and the prices paid, the dates, (*a*) of purchase, and (*b*) of delivery. Presented 23rd February, 1909.—*Mr. Clare*.. .. ..*Not printed.*

85*a*. Return to an order of the House of Commons, dated 22nd March, 1909, showing the claims of any person or persons in Nova Scotia against the government by reason of personal damages or losses of animals or damages to property on account of the Intercolonial Railway, settled or paid between 1st June and 31st December, 1908, together with the names and addresses of such persons, the nature of their claims, how settlement was effected, and on what date settlement was effected in each case. Presented 26th March, 1909.—*Mr. Rhodes*.. .. ..*Not printed.*

86. Return to an address of the House of Commons, dated 15th February, 1909, for a copy of all orders in council, regulations, reports, correspondence, documents, and papers under, relating to or touching the several treaties of 11th April, 1908, between His Majesty and the United States of America, relating to or touching any action, proceeding, appointment, reports or other matter made, had or undertaken under or pursuant to the said treaties or either of them. Presented 25th February, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

87. Return to an order of the House of Commons, dated 26th February, 1909, for copy of a report of Thomas Costello, special officer of customs, on the subject of the Woollen Industry in Great Britain. Presented 26th February, 1909.—*Mr. Paterson.*
Printed for both distribution and sessional papers.

88. Copy of special agreement for the submission of question relating to Fisheries on the North Atlantic Coast under the general treaty of Arbitration concluded between the United States and Great Britain on the 4th day of April, 1908. Presented 26th February, 1909, by Hon. A. B. Aylesworth.. .. ..*Not printed.*

89. Return to an order of the House of Commons, dated 22nd February, 1909, showing how many heads of stock there are on the respective experimental farms and what they consist of; the estimated value of the different kinds, and for what purposes they are utilized; how many acres there are in each experimental farm; how many acres there are under cultivation on each farm. Presented 26th February, 1909.—*Mr. Staples*.. .. ..*Not printed.*

90. Declaration of Principles, North American Conservation Conference. Presented 26th February, 1909, by Hon. S. A. Fisher..*Printed for both distribution and sessional papers.*

91. Statement of insurance paid on the St. Lawrence route on merchandise, provisions and grain, from 1900 to 1907, both years inclusive. Presented (Senate) 28th January, 1909, by Hon.. Sir Richard Cartwright.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

92. Statement of the affairs of the British Canadian Loan and Investment Company (Limited), for the year ended the 31st of December, 1908, also a list of the shareholders for the same year, in compliance with the Loan Corporation Act. Presented (Senate) 25th February, 1909, by the Hon. the Speaker.. .. ..*Not printed.*

93. Copy of the Progress Report, Hudson Bay Railway Surveys, 1st February, 1909. Presented 4th March, 1909.—*Hon. G. P. Graham*.. .. ..*Not printed.*

93*a*. Return to an order of the House of Commons, dated 8th February, 1909, showing all surveys made to date in the prosecution of the proposed Hudson Bay Railway. Presented 8th March, 1909.—*Mr. Meighen*.. .. ..*Not printed.*

94. Return to an order of the House of Commons, dated 26th January, 1909, of all correspondence, papers and reports of engineers or others, relating to the authorization and construction of a canal from Lake Simcoe to Newmarket, including all contracts entered into, the amount of money so far paid, and the estimated cost of the completed work, with plans showing the capacity of the canal, and for all statements and estimates of the commercial reasons for the work. Presented 4th March, 1909.—*Mr. Foster*.. .. ..*Not printed.*

94*a*. Return to an order of the House of Commons, dated 22nd March, 1909, showing: 1. Who were employed to value the land of the right of way of the canal from Holland River to Newmarket, and what other duties than valuation of lands these parties were entrusted with. 2. The remuneration of each of these valuators. 3. How long they were employed, and upon what terms. 4. (*a*) What properties they valued, (*b*) at what amount or rate in each case, (*c*) the acreage of each property, (*d*) in how many cases, by names, the valuations were accepted by the owners, (*e*) in how many cases, by names, the valuations were finally rejected by the owners, (*f*) in what cases expropriation proceedings were resorted to, and (*g*) the result as compared with valuators' figures. 5. What titles to all properties have been required. Presented 31st March, 1909.—*Mr. Lennox*.. .. ..*Not printed.*

95. Return to an order of the House of Commons, dated 8th February, 1909, for a copy of all lists of voters as prepared by the enumerators and completed by the deputy returning officers for the several polling subdivisions in the electoral riding of Calgary, in the province of Alberta, and used in the recent general election for the House of Commons. Presented 4th March, 1909.—*Mr. McCarthy*.. .. ..*Not printed.*

95*a*. Return to an order of the House of Commons, dated 8th February, 1909, showing the names of the deputy returning officer, poll clerk, scrutineer or agent, or any other officer who acted, respectively, as such in the several polling subdivisions in the electoral district of Calgary in the recent general election for the House of Commons. Presented 4th March, 1909.—*Mr. McCarthy* .. ..*Not printed.*

95*b*. Return to an order of the House of Commons, dated 15th March, 1909, showing, in respect of the election for the House of Commons, held in the county of Montcalm, on the 26th of October, 1908, and in respect of each polling subdivision (*a*) the number of votes polled for each candidate; (*b*) the total number of valid votes polled; (*c*) the number of rejected ballots; (*d*) the number of spoiled ballots; (*e*) the number of voters on the revised voters' list; (*f*) the number of ballot papers in possession of the deputy returning officer at the hour of the opening of the poll; (*g*) the number of ballot papers remaining unused in the hands of the deputy returning officer at close of the pool; (*h*) the name and the address of the returning officer and names and addresses of each of his deputies and poll clerks; (*i*) all correspondence between the government, or any officer thereof, and the returning officer, or any deputy returning officer or poll clerk or, any candidate in respect of said election. Presented 22nd March, 1909.—*Mr. Amcs*.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

95*c*. Return to an order of the House of Commons, dated 17th February, 1909, for a copy of all lists of voters as prepared by the enumerators and completed by the deputy returning officers for the several polling subdivisions in the electoral riding of Qu'Appelle, and used in the recent general election for the House of Commons; also for a return showing the boundaries of the said polling subdivisions, and the names of the enumerators, deputy returning officers, poll clerks, candidates' agents or scrutineers who acted for each poll. Presented 22nd March, 1909.—*Mr. Lake*..*Not printed.*

96. Return to an order of the House of Commons, dated 11th February, 1909, for a copy of a report made by Charles Olin to the Department of the Interior, of his visit to Sweden for that department in 1907-8, and of all correspondence leading up to his appointment to make such trip, and in any way relating thereto. Presented 4th March, 1909.—*Mr. Goodeve*.. .. ..*Not printed.*

97. Return to an order of the House of Commons, dated 8th February, 1909, for a copy of all applications that have been received for the transfer of villa lots in section 14, township 24, range 1, west of the fifth meridian, and all correspondence in connection therewith since the 10th day of June, 1908. Presented 4th March, 1909.—*Mr. McCarthy.*
Not printed.

98. Return to an order of the House of Commons, dated 1st March, 1909, showing the average number of men employed in every capacity in the working, maintenance and repairs of the Carillon and Grenville Canals during each of the following months: July and August, 1906 and 1908, September and October, 1907 and 1908; and the total outlay for wages and salaries; also, the total expenditure of every kind in connection with the said canal during each of these months. Presented 4th March, 1909.—*Mr. Perley*.. .. ..*Not printed.*

99. Return to an address of the House of Commons, dated 22nd February, 1909, for a copy of orders in council, correspondence, letters, despatches, memoranda and communications, between the Imperial and Canadian governments relating to the organization of a Imperial General Staff. Presented 5th March, 1909.—*Mr. Talbot.*
Printed for both distribution and sessional papers.

100. Return to an order of the House of Commons, dated 1st February, 1909, for a copy of all correspondence between the Surveyor General's Department or Department of Indian Affairs and the late Mr. Vaughan, D.L.S., covering his instructions to survey the parish of St. Peters, St. Clements and St. Peters Indian Reserve; together with Mr. Vaughan's correspondence, &c.; of all correspondence between the Department of the Interior and Mr. H. M. Howell, Commissioner to investigate Indian claims on said reserve; of the report of Mr. Rothwell, Law Clerk of the Department of the Interior, on the said St. Peters land claim; of the itemized account of Frederick Heap, of the services rendered during the investigation, and instruction to him from the Department of the Interior and Indian Affairs. Presented 5th March, 1909.—*Mr. Bradbury.*
Not printed.

100*a*. Return to an order of the House of Commons, dated 22nd February, 1909, for a copy of the treaty arranged between St. Peters Indians and the government; and of all correspondence, papers, instructions, and documents relating to the aforesaid treaty. Presented 11th March, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

100*b*. Return to an order of the House of Commons, dated 17th February, 1909, showing the number and names of all parties who were entitled to receive patents, and did receive patents, under the treaty made by Mr. H. M. Howell for the surrender of St. Peters Reserve, Manitoba. Presented 12th March, 1909—*Mr. Bradbury*.. .. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

100*c*. Supplementary Return to No. 100. Presented 5th April, 1909.. .. ..*Not printed.*

100*d*. Return to an order of the House of Commons, dated 5th April, 1909, for a copy of all papers, letters and correspondence relating to, and an itemized statement of, the account of Mr. H. M. Howell in regard to the surrender of St. Peters Reserve. Presented 27th April, 1909.—*Mr. Smyth*.. .. ..*Not printed.*

100*e*. Supplementary Return to No. 100. Presented 19th May, 1909.. .. ..*Not printed.*

101. Supplementary Convention respecting the commercial relations between France and Canada, entered into at Paris on the 23rd day of January 1909, between His Majesty and the President of the French Republic. Presented 8th March, 1909, by Hon. W. S. Fielding.. .. .. *Printed for both distribution and sessional papers.*

102. Correspondence relating to Supplementary Convention respecting commercial relations between Canada and France. Presented 10th March, 1909, by Hon. W. S. Fielding. *Printed for both distribution and sessional papers.*

103. Return to an order of the House of Commons, dated 22nd February, 1909, for a copy of all evidence, reports, correspondence, writings, papers and documents in possession or control of the Department of Inland Revenue, including all correspondence and written statements between the department or its officials or agents, and the government of Manitoba, or the Attorney General or other officials or agents of that province, in reference to the quality of coal oil sold in Manitoba, and accidents caused by coal oil there during the year 1908, and connected with recent investigations into the cause of these disasters. Presented 8th March, 1909.—*Mr. Schaffner*.. .. ..*Not printed.*

104. Copies of cablegrams between His Excellency the Governor General and the Honourable the Secretary of State for the Colonies respecting the International Boundary Waters Treaty. Presented 8th March, 1909, by Sir Wilfrid Laurier.. .. ..*Not printed.*

104*a*. International Boundary Waters Treaty, signed at Washington, 11th January, 1909, (2) Rider attached by United States Senate. Presented 15th March, 1909, by Hon. W. S. Fielding.. .. ..*Not printed.*

105. Return to an order of the House of Commons, dated 16th January, 1909, showing the number and amount of temporary loans made by the government since 1st July, 1906, the bank or corporation with which each was made, the conditions and cost of the same. Presented 9th March, 1909.—*Mr. Foster*... .. ..*Not printed.*

105*a*. Return to an order of the House of Commons, dated 26th January, 1909, showing the amount and conditions of each permanent loan made by the government since 1st July, 1896, the bank or corporation through which it was made, the cost of each, in (*a*) brokerage and commission, (*b*) stamps, &c., (*c*) legal or other services, and (*d*) discounts, the net result of each loan and per cent of interest upon the same. Presented 24th March, 1909.—*Mr. Foster*.. .. ..*Not printed.*

105*b*. Supplementary Return to No. 105*a*. Presented 31st March, 1909.. .. .. ..*Not printed.*

105*c*. Return to an order of the House of Commons, dated 8th March, 1909, showing what expenses under the following heads: (*a*) bank commission, (*b*) underwriting charges, (*c*) brokerage, and (*d*) advertising, were incurred by the government on each of the following loans, and to whom the several amounts were paid, viz:—

	£ s. d.
1874 loan extended to 1911, 4 per cent..	1,753,830 4 10
1875-8 Public Works guaranteed loan, 4 per cent..	3,200,000 0 0
Loan of 1884, 3½ per cent..	5,000,000 0 0

CONTENTS OF VOLUME 17—*Continued.*

Canada reduced 1885, 4 per cent..	6,443,136 2 9
Loan of 1885, 4 per cent..	4,000,000 0 0
C. P. R. land grant 1888, 3½ per cent..	3,093,700 0 0
4 per cent loan of 1908-12, 4 per cent..	1,379,600 0 0
3½ per cent loan 1908, (February issue) 3½ per cent..	3,000,000 0 0
3¾ per cent loan 1908, 3¾ per cent..	5,000,000 0 0
3½ per cent loan 1908 (October issue) 3½ per cent..	5,000,000 0 0
3¾ per cent loan 1909, 3¾ per cent..	6,000,000 0 0
Payable in Canada—	
Reduced loan of 1883, extended 3½ per cent..	$1,425,800 00
Dominion stock issue—	
A reduced in 1897, 3½ per cent..	58,899 67
B reduced in 1897, 3½ per cent..	325,900 00
C reduced in 1897, 3½ per cent..	49,066 34
E extended for 10 years, from 1st July, 1906, 3⅔ per cent..	2,500,000 00
Dominion stock issue 1891, 3½ per cent..	404,202 00

$5,000,000 for one month; Bank of Montreal, Ottawa; 2nd March, 1909; 4 per cent. Presented 6th April, 1909.—*Mr. Sharpe (Ontario).. .. ..Not printed.*

105*d*. Return to an order of the House of Commons, dated 26th January, 1909, showing, in respect of the sinking fund in connection with each outstanding loan forming on 31st March, 1908, part of the funded public debt: (*a*) term of loan, (*b*) the sinking fund rate, (*c*) the amount that has been each year set aside, including earnings of interest reinvested, (*d*) the aggregate amount to credit of sinking fund of that particular loan on 31st March, 1908, (*e*) the aggregate amount which may be reasonably expected to stand to credit of sinking fund on date when loan shall fall due, and if extended at the end of final period, (*f*) percentage which accrued sinking fund and its earnings will bear to the nominal amount of loan on date of expiry. Presented 6th April, 1909.—*Mr. Ames.. .. ..

CONTENTS OF VOLUME 17—*Continued.*

106*a*. Return to an order of the House of Commons, dated 22nd February, 1906, showing how many acres have already been taken up in Manitoba, Saskatchewan and Alberta, respectively, by homestead and pre-emption, by railway lands, by Hudson Bay lands; by other corporations or persons; by waste, swamps or mountainous land unfit for tilling; by lake areas, including Winnipeg, Winnipegosis, Manitoba, Big Quill, Birch and Beaver; and the area in square miles of each province above named. Presented 11th March, 1909.—*Mr. Hughes*.. .. ..*Not printed.*

106*b*. Return to an order of the House of Commons, dated 8th March, 1909, for a copy of all applications, advertisements, tenders, leases, correspondence and papers of every description, with respect to timber berths Nos. 1316, 1317, 1318, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1360, 1361, 1362, 1363, 1364 and 1365. Presented 30th March, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

106*c*. Return to an order of the House of Commons, dated 22nd March, 1909, for a copy of all correspondence, communications in writing and documents, to the Minister of the Interior, or any official of the department, and the replies or communications from the minister or any official of the department, since 11th January, 1905, relating to the transfer of certain swamp lands in the Big Grass Marsh, in the province of Manitoba, to His Majesty King Edward VII., for the purposes of the province of Manitoba. Presented 30th March, 1909.—*Mr. Molloy*.. .. ..*Not printed.*

106*d*. Supplementary Return to an order of the House of Commons, dated 3rd March, 1909, showing with respect to leases granted since 30th June, 1896, for timber on Dominion lands in British Columbia, the names and addresses of lessees, the date, term and acreage of each lease, and the bonus received for the same. Presented 5th April, 1909. —*Mr. Taylor (New Westminster)*.. .. ..*Not printed.*

106*e*. Return to an order of the House of Commons, dated 5th April, 1909, for a copy of all correspondence, reports, papers, and communications in the possession of the Dominion Lands Office at Prince Albert and the Department of the Interior at Ottawa, in connection with the application for patent for the N.E. ¼ section 10, township 47, range 1, west 3rd meridian of A. A. Strachan, and the performance of his homestead duties. Presented 16th April, 1909.—*Mr. Lake*.. .. ..*Not printed.*

107. Return to an order of the House of Commons, dated 1st February, 1909, showing the total amount received by the Winnipeg *Free Press* from all the departments of the government from 1st July, 1896, to 1st January, 1909, specifying amount each year. Presented 11th March, 1909.—*Mr. Herron*.. .. ..*Not printed.*

107*a*. Supplementary Return to No. 107. Presented 26th March, 1909.. .. .. ..*Not printed.*

108. Return to an order to the House of Commons, dated 26th January, 1909, showing approximately the total amount of available cash on deposit to the credit of the government on the last day of each month during the period between the 1st of April, 1907, and the 31st December, 1908. Presented 11th March, 1909.—*Mr. Ames*.. ..*Not printed.*

109. Return to an order of the House of Commons, dated 26th January, 1909, showing to date the statement found on page 15 of the Budget Speech of 1898. Presented 11th March, 1909.—*Mr. Ames*.. .. ..*Not printed.*

109*a*. Return to an order of the House of Commons, dated 26th January, 1909, showing, in detail, the contingent or nominal liabilities of the Dominion government on the 1st January, 1909; that is to say, a statement of all amounts which might under existing legislation become exigible, such as earnable railway subsidies, government guaranteed loans, deficiencies, which might require to be made good, &c. (Supplementary to No. 105*g*.) Presented 11th March, 1909.—*Mr. Ames*.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

110. Return to an order of the House of Commons, dated 17th February, 1909, for a copy of all correspondence passing between the Department of Justice and the officers of New Westminster Penitentiary or other persons whatsoever, relating to the visit or proposed visit of detectives to Bill Miner during his incarceration in said penitentiary; also of the report of the Inspector of Penitentiaries after investigating the circumstances connected with Miner's escape, and of the evidence on which such report is based; also a copy of telegram sent from the said penitentiary to the department or its officers respecting Miner's escape, and of such telegrams as received and of telegrams sent and received in answer within two weeks from such escape. Presented 12th March, 1909.—*Mr. Taylor (New Westminster)*.. .. ..*Not printed*..

111. Return to an order of the House of Commons, dated 17th February, 1909, showing what amounts the government has paid property owners for damages caused by the holding up of water in the Otonabee River, between Hastings and Peterboro', and the names of the parties receiving settlements. Presented 15th March, 1909.—*Mr. Sexsmith.*

Not printed.

111*a*. Return to an order of the House of Commons, dated 17th February, 1909, showing what amounts the government has paid property owners in or around Stony Lake for damages caused by the rising of water, and who they were. Presented 15th March, 1909.—*Mr. Sexsmith*.. .. ..*Not printed.*

111*b*. Return to an order of the House of Commons, dated 8th February, 1909, showing what measures, if any, have been taken by the government to lower the waters of Lakes Simcoe and Couchiching; what moneys, if any, have been expended for this purpose, the date of expenditure, and persons superintending the same; the future intention of the government in this direction, for the purpose of reclaiming thousands of acres of first-class arable land. Presented 25th March, 1909.—*Mr. Sharpe (Ontario).*

Not printed.

112. Return to an order of the House of Commons, dated 3rd March, 1909, for the production of the original tenders received in reponse to advertisement calling for tenders for the erection of the building at Kingston R. M. C., intended for barracks accommodation, for stables; and also for a Return showing the advertisement and the papers in which inserted; said papers not to be part of the archives of this House, but to be returned by the Clerk to the Department of Public Works after inspection. Presented 15th March, 1909.—*Mr. Edwards*.. .. ..*Not printed.*

112*a*. Return to an order of the House of Commons, dated 3rd March, 1909, for the production of the original tenders received in response to advertisement calling for tenders for the erection of the Veterinary Hospital at Kingston, and also for a return showing the advertisement and the papers in which inserted, said papers not to be part of the archives of this House, but to be returned by the Clerk to the Department of Public Works after inspection. Presented 24th March, 1909.—*Mr. Edwards*.. .. ..*Not printed.*

113. Return to an order of the House of Commons, dated 22nd February, 1909, for a copy of all papers, letters, telegrams and communications, with reference to the complaint against and conviction and fine of F. Macdonald Jacobs, of Caughnawaga Reserve, for cutting cordwood upon territory occupied by him on the reserve, and to have refund of dues or fine. Presented 15th March, 1909.—*Mr. Boyce*.. .. .. ..*Not printed.*

114. Return to an address of the House of Commons, dated 17th February, 1909, for a copy of all correspondence, letters, despatches, memoranda, &c., between the Imperial government, or any member thereof, and the Governor General, government or any member thereof, relating to or bearing upon the question of Canada contributing to the support of the British fleet, or purchasing ships of her own, or assisting in any way in maintaining with the mother country the supremacy of the seas. Presented 17th March, 1909.—*Mr. Worthington*.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

115. Return to an order of the House of Commons, dated 22nd February, 1909, for a copy of all reports, memorials, documents and correspondence in possession of the government with regard to the superannuation and to making provision for the superannuation of officers and members of the crew of the winter or ice-breaking steamers owned or in the employ of the government. Presented 17th March, 1909.—*Mr. Warburton.*
Not printed.

116. Return to an order of the House of Commons, dated 17th February, 1909, for a copy of all correspondence between J. H. Davis and the Department of Marine and Fisheries referring to the fisheries of Manitoba; and of all petitions and correspondence from the Fisherman's Union, Gimli, Manitoba, to and with the said department. Presented 17th March, 1909.—*Mr. Bradbury.. .. ..Not printed.*

116*a*. Return to an order of the House of Commons, dated 17th February, 1909, for a copy of all correspondence or petitions received from F. W. Colclaugh, while he was inspector of fisheries for Manitoba, referring to the operations of commercial companies and others. Presented 29th March, 1909.—*Mr. Bradbury.. .. ..Not printed.*

117. Return to an order of the House of Commons, dated 8th March, 1909, for a copy of all reports, correspondence, statements, receipts, vouchers and documents of every description with respect to the granting and payment of the railway subsidy authorized under 6-7 Edward VII., chapter, 40, section 1, subsection 16. Presented 17th March, 1909.—*Mr. Ames.. .. ..Not printed.*

118. Return to an address of the House of Commons, dated 1st March, 1909, for a copy of all correspondence, documents and papers relating to the construction, or proposed construction, of a line of railway from a point at or near Caledonia to Liverpool, not exceeding 29 miles, referred to in the Acts of 1903, chapter 57, section 23*d*, and all orders in council, reports, contracts, agreements and other papers, relating to the same matters. Presented 18th March, 1909.—*Mr. Borden (Halifax).. .. ..Not printed.*

119. Return to an address of the Senate dated 3rd March, 1909, calling for a statement showing the imports of oxide of aluminum for the years 1903, 1904, 1905, 1906, 1907, 1908, with value. Also a statement showing the exports of aluminum for the same years, with values. Presented 10th March, 1909.—*Hon. Mr. Domville.. ..Not printed.*

120. Return to an order of the House of Commons, dated 1st February, 1909, showing the number of applications made to the Board of Railway Commissioners for the privilege of crossing railway tracks with telephone and telegraph wires and with water mains, each, over the said period from 1st February, 1904, to the 1st January, 1908; the total number of applications granted over said period; the total number of applications refused; the date of each application; the date each application was granted; the length of time from the application to the granting of same; and what time should elapsed before the board should give its decision. Presented 23rd March, 1909.—*Mr. Barr.. .. ..Not printed.*

121. Return to an order of the House of Commons, dated 17th February, 1909, giving detailed items of the sum of $10,646.93, being revenue received from Kingston Penitentiary, other than from sale of twine, as shown on page L—36 of the Auditor General's Report, and stating what proportion of such revenue was derived from sales to officers of the penitentiary, with the names of such officers, and the amounts and nature of the goods purchased by them. Presented 23rd March, 1909.—*Mr. Barnard....Not printed.*

122. Return to an order of the House of Commons, dated 1st March, 1909, for a copy of all papers and correspondence between the government and the government of British Columbia with reference to the reduction of Indian Reserves in that province, proportionately to the decrease of Indian population as provided for by order in council. Presented 23rd March, 1909.—*Mr. Barnard.. .. ..Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

123. Return to an order of the House of Commons, dated 17th February, 1909, for a copy of all correspondence, reports and papers of every description treating of or in connection with the application of or grant to Francis Percival Aylwin, of the city of Ottawa, of a tract of land in the province of Alberta for irrigation purposes. Presented 23rd March, 1909.—*Mr. Magrath*.. .. ..*Not printed.*

124. Return to an order of the House of Commons, dated 3rd March, 1909, showing the amounts on deposit in the Government Savings Department on 1st October, 1889, 1st October, 1896, and 1st October, 1897 and 1898; how many officials were employed in connection with the management of this fund in the years 1888, 1890, 1898, 1900 and 1908; the cost of the management of this fund in the years 1888, 1890, 1898, 1900 and 1908. Presented 23rd March, 1909.—*Mr. Sharpe (Ontario)*.. .. ..*Not printed.*

124*a*. Supplementary Return to No. 124. Presented 5th April, 1909.. .. .. ..*Not printed.*

125. Return to an order of the House of Commons, dated 1st February, 1909, showing what operations, including all expenditures, were carried on last year under the fishing leases granted to F. H. Markey, of Montreal, for Great Slave Lake, Nelson and other rivers; J. K. McKenzie, of Selkirk, for Lesser Slave Lake and Arthabaska Lakes; Archibald McNee, for parts of James Bay; Coffey and Merritt, Cedar Lake; The Capital City Packing Company (Limited) and the William Hickey Company (Limited). Presented 24th March, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

126. Return to an order of the House of Commons, dated 26th January, 1909, showing the names and places of registry of the several American fishing vessels seized by the Dominion fishery cruisers for illegal fishing in Canadian waters since 1900, and of the courts in which action for penalties or forfeitures were instituted, the mode of service of the writs or other process on such foreign fishing vessels, and in what court tried and a statement of the fines imposed, or proceeds of sale realized, and how such fines or proceeds of forfeiture were appropriated; also a copy of the judgment of the High Court of Justice for Ontario in the case of Rex vs. American Gasoline Fishing Boat. Presented 24th March, 1909.—*Mr. Macdonell*.. .. ..*Not printed.*

127. Return to an address of the House of Commons, dated 1st February, 1909, for a copy of all orders in council, reports, correspondence, deeds, conveyances, regulations, conditions and other documents relating to (*a*) the grant or conveyance to the Grand Trunk Railway Company of Canada of a portion of Major Hill Park, so-called, for the site of an hotel, or touching the use or purpose for which the said conveyance was made or proposed; (*b*) the grant or conveyance to the said company or to the Ottawa Railway Terminal Company or to any other person or corporation of any lands in or adjoining the city of Ottawa for the purpose of or in connection with the building of a station at Ottawa or for other railway purposes. Presented 24th March, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

128. Return to an order of the House of Commons, dated 3rd March, 1909, showing how many post offices have been transferred in the province of Manitoba since 1st November, 1908; who the former postmasters were, and who the present postmasters are, with the names of offices; and the reasons assigned for the transfers. Presented 24th March, 1909.—*Mr. Roche*.. .. ..*Not printed.*

128*a*. Return to an order of the House of Commons, dated 8th March, 1909, for a copy of all applications, correspondence, reports, documents and papers relating to the establishment and service of a post office at Hand Hills, Alberta. Presented 13th April, 1909.—*Mr. Magrath*.. .. ..*Not printed.*

CONTENTS OF VOLUME 17—*Continued.*

128*b*. Return to an order of the House of Commons, dated 22nd March, 1909, for a copy of all correspondence, petitions and reports addressed to the government, or Post Office Department, and all correspondence and orders consequent thereon, relating to the change of the name of the post office of Weymouth North, and of the post office of Weymouth Bridge to Weymouth. Presented 19th April, 1909.—*Mr. Jameson.*
Not printed.

129. Return to an order of the House of Commons, dated 8th March, 1909, showing the names and addresses of the several immigration agents in Canada whose duty it is to locate or settle immigrants upon their arrival in Canada, what salary or remuneration has been paid to each such agent for the fiscal year 1908 and up to the 1st February, 1909, and on what basis they are paid. Presented 25th March, 1909.—*Mr. Macdonell.*
Not printed.

129*a*. Return to an order of the House of Commons, dated 8th March, 1909, showing the names and addresses of the several inspectors of immigrants employed by the government; what salary or remuneration has been paid to each such inspector during the fiscal year 1908 and up to the 1st February, 1909; and on what basis they are paid. Presented 25th March, 1909.—*Mr. Herron*.. .. ..*Not printed.*

129*b*. Return to an order of the House of Commons, dated 10th February, 1909, for a copy of all correspondence, reports and documents between the Department of the Interior and the immigration agents in the United States; and between the Department of the Interior and the colonization societies since the 1st of January, 1908. Presented 30th March, 1909.—*Mr. Paquet*.. .. ..*Not printed.*

130. Return to an order of the House of Commons, dated 15th March, 1909, showing the amounts paid during the years 1903-4, 1905-6 and 1907-8 by the following Departments: (*a*) Marine and Fisheries, (*b*) Railways and Canals, (*c*) Customs, (*d*) Post Office, (*e*) Militia and Defence, and (*f*) Public Works, to the following persons, firms and companies, viz.—The Wilson Gas Buoys Company, the Canadian Fog Signal Company, James Murphy, William R. Blakiston, James Holliday, Allison Davie, J. B. Coté, Adolph Huot, Joseph Samson, Samson & Philion, E. Pelletier, Napoleon Mercier, Severin Martel, Michel Thibodeau, Edmond Belanger & Co., Marie & Themblay, Terreau & Racine, Rock City Tobacco Company, J. N. Martineau, George Marchand, Jean Drolet, Elie Amyot, Charles A. Parent, A. N. Melvin, W. G. Robertson, Wm. Robertson & Co., Howell & Co., St. John Iron Works, Charles McDonald, John A. Moore, Wm. J. Vroom, John A. McAvity Bros., George McAvity, Patrick J. Mooney, Polson Bros. or Polson Iron Works, Merwin & Company, F. L. Brooks & Company, F. S. Brooks, Safety Company, Submarine Company, Wm. J. Allen and Mr. Willard. Presented 25th March, 1909.—*Mr. Sharpe (Ontario)*.. .. .. *Not printed.*

131. Return to an order of the House of Commons, dated 25th January, 1909, showing in relation to each dog-fish reduction plant or establishment for the reduction of dog-fish erected by or for the government or maintained in whole or in part by the government (*a*) the cost of construction, (*b*) the cost of maintenance for each year, (*c*) the location, (*d*) the quantity of dog-fish treated thereat in each year, and (*e*) the amount realized from the sale or disposal thereof in each year. Presented 25th March, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

132. Return to an order of the House of Commons, dated 17th February, 1909, showing the amount of money paid by the government, including all branches of the service, from 1st January, 1897, to 1st January, 1909, to the Logberg Printing Company, Winnipeg. Presented 26th March, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

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132*a*. Supplementary Return to No. 132. Presented 6th April, 1909.. .. ..*Not printed.*

133. Return to an order of the House of Commons, dated 22nd March, 1909, showing the amount of produce of the following lines shipped to Great Britain or other countries in cold storage, or cooled air chambers, during the years 1907 and 1908:—Apples, in barrels or other packages, pears, plums, tomatoes, fresh meat, in pounds, fowl, fish, butter, eggs and cheese; to what country or countries they were shipped, and their condition on landing; the system of cold storage principally in use on the steamships carrying such produce. Presented 26th March, 1909.—*Mr. Sproule*.. .. ..*Not printed.*

134. Return to an address of the House of Commons, dated 10th February, 1909, for a copy of all correspondence, telegrams, papers, reports and valuations of officers or experts, and orders in council, in connection with the purchase, removal and repairing of the dredge *Industry* and parts thereof, including scow, boilers and parts. Presented 29th March, 1909.—*Mr. Foster*.. .. ..*Not printed.*

135. Copy of a letter sent to all officers of the Department of Public Works charged with the purchase of materials and supplies, and the certifying of accounts for same, under the different branches of the chief architect, the chief engineer and the superintendent of telegraphs. Presented 31st March, 1909, by Hon. W. Pugsley.. .. .. ..*Not printed.*

136. Return to an order of the House of Commons, dated 8th February, 1909, showing the Ross Rifles, Mark I. and Mark II., or any other description of Ross Rifle, used by the Canadian rifle team at Bisley last year in the regular team competitions; what Ross rifles of any description were used in the Bisley competitions, regular or extra series matches, by any member of the Canadian team, or any Canadian marksman engaging in such matches; with the name of the individual, and if in the employ of the Ross Rifle Company; the description of the rifle, and in what way it differs from the Ross Rifle, Mark I. and Mark II., both as to length of barrel and such expert accessories as wind gauges, sights, globe or ring, spirit levels, &c., if a target rifle or a service rifle, and if to be adopted by the government for the militia; and where the rifle was manufactured in toto. Presented 1st April, 1909.—*Mr. Worthington*.. .. ..*Not printed.*

137. Return to an address of the House of Commons, dated 10th February, 1909, for a copy of all correspondence, papers, reports, estimates, orders in council, &c., in connection with the surveys of and boring in, and called for tenders for dredging or excavation in the St. John Harbour and Courtney Bay, or either of them, during the year 1908; a copy of the advertisements, names of the papers in which they were inserted, the tenders received and dates, the names of the tenderers and the amount of each tender; which tender, if any, was accepted, the deposit required, and in which bank it was deposited. Presented 6th April, 1909.—*Mr. Daniel*.. .. ..*Not printed.*

137*a*. Return to an address of the House of Commons, dated 10th February, 1909, for a copy of all correspondence, papers, orders in council, advertisements, tenders, contracts, &c., in connection with dredging in the harbour of St. John, New Brunswick, covering the area dredged by Gershen B. Mayes, the Dominion Dredge Company, John Moore, or other parties, during the years 1904, 1905, 1906, 1907 and 1908; the quantities dug under each contract, the amounts paid to each contractor, the date of each payment, and to whom. Presented 11th May, 1909.—*Mr. Daniel*.. .. ..*Not printed.*

138. Return to an order of the House of Commons, dated 1st February, 1909, showing: 1. The total amount expended on public works by this government in the riding of Bonaventure prior to the general elections of 1900. 2. The total amount expended by the government in this riding, (*a*) on public works, and (*b*) in aid of the railways and other undertakings since said general election, and the estimated additional amount

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required, (*a*) to complete these public works, and (*b*) to meet the subsidies or grants in aid of railways or other undertakings. 3. The various public works undertaken by the Government in this riding between the general election of 1896 and the general election of 1900, the dates when the several works were undertaken, whether they were let by public advertisement, tender, and contract, or how otherwise, and the sums of money, stated separately, expended upon these works prior to the election of 1900. 4. Which of these several works were completed and which of them remained uncompleted at the date of the election in 1900. 5. The sums of money, stated separately, expended in or towards completing these works since the said election of 1900, and the dates of expenditure. 6. The various public works undertaken and carried on by the Government since the general election of 1900, the dates when the several works were inaugurated or commenced, the sums of money, stated separately, expended upon these works, and the estimated amount required to complete such of these works as have not been completed; and showing whether these works were done by tender or contract, or how otherwise. 7. The moneys granted by the Government by way of subsidy aid to railways or other undertakings in said riding since the general election of 1900, the sums of money paid under these grants and the estimated amount required to meet future payments. 8. The public works commenced and the money obligations incurred and moneys expended for public works within said riding of Bonaventure during the month of October last. Presented 13th April, 1909.—*Mr. Lennox*.. .. .. ..*Not printed.*

139. Return to an order of the House of Commons, dated 1st March, 1909, showing the names and addresses of all half-breeds living in the United States who have been allotted scrip since January, 1902, and to whom said scrip was sent or delivered. Presented 13th April, 1909.—*Mr. Bradbury*.. .. ..*Not printed.*

140. Return to an address of the House of Commons, dated 1st March, 1909, for a copy of all correspondence, orders in council, papers and other documents relating to the disallowance, or application therefor, of an Act of the Legislature of the province of Ontario, intituled: 'An Act respecting Cobalt Lake and Kerr Lake,' being chapter 15 of the Statutes of 1907. Presented 13th April, 1909.—*Mr. Clarke (Essex)*..*Not printed.*

141. Return to an order of the House of Commons, dated 15th February, 1909, showing: 1. The total mileage of railways authorized to be constructed under charters granted by the Dominion Parliament, between the period from 1888 to 1908, inclusive, exclusive of the Grand Trunk Railway Company, the Canadian Pacific Railway Company, the Canadian Northern Railway Company, and the Grand Trunk Pacific Railway Company. 2. Exclusive of the above named companies, the number of miles actually constructed under said charters. 3. The number of said companies so incorporated. 4. The number of those that have actually constructed any portion of the railway so authorized. 5. The number of said charters which have lapsed. 6. The number granted an extension of time for construction. 7. The number granted two such extensions. 8. The number granted three such extensions or more. Presented 19th April, 1909.—*Mr. Middlebro*.. .. ..*Not printed.*

141*a*. Return to an order of the House of Commons, dated 17th February, 1909, giving a list of railway charters granted since 1st January, 1900, other than to the Grand Trunk, Grand Trunk Pacific, the Canadian Northern and the Canadian Pacific Railway Companies, showing those whose powers have lapsed, and the length of each of the proposed roads and branches, the date of charters and renewals, if any, the total mileage constructed, the capital stock authorized, subscribed and paid up. Presented 19th April, 1909.—*Mr. Magrath*.. .. ..*Printed for both distribution and sessional papers.*

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142. Return to an order of the House of Commons, dated 1st March, 1909, showing: 1. At what work the Translation Branch of the House of Commons is employed. 2. The number of permanent translators in this branch. 3. The total amount of salaries paid to these translators. 4. The documents, reports and other matters which have been translated in this branch in the last twelve months, not including the pages already translated in the preceding year and repeated for the purpose of the report, nor the tables already made and translated and repeated for the purpose of completing these reports and documents, which have been most recently translated. 5. The total number of pages translated by the permanent translators. 6. The total number of persons, outside of the Translation Branch, to whom has been given translation work. 7. How much this outside work has cost, and how many pages have been translated in this way. 8. What Blue-books, if any, and other matters, excepting *Hansard*, is translated in other departments other than the Translation Branch of the House of Commons, and in what departments. Presented 19th April, 1909.—*Mr. Boyer.*
Not printed.

143. Certified copy of a Report of the Committee of the Privy Council, approved by His Excellency on the 19th April, 1909.—Regulations of the Civil Service Commission with reference to entrance into and promotion in the service. Presented 20th April, 1909, by Hon. C. Murphy.. .. .. .

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name of each statistical or special publication, the number of such printed, and the number of pages in each, the number of officials employed in the preparation of the publication, the total cost of each, and the total cost of all such publications for the year 1908. Presented 22nd April, 1909.—*Mr. Foster*.. .. ..*Not printed.*

148. Return to an order of the House of Commons, dated 5th April, 1909, for copies of all correspondence between the Marine and Fisheries Department and any person or persons relative to the cancellation of the certificate of Thomas Bibbington, or the removal of his name from the list of certified pilots for the port of Victoria, B.C. Presented 22nd April, 1909.—*Mr. Barnard*.. .. ..*Not printed.*

149. Return to an order of the House of Commons, dated 8th February, 1909, showing all contracts for the carrying of mail, which expire in the month of April, 1909, that have been renewed without asking for tenders; where the routes are situated, the price paid for carrying the mail, and the name of the carrier, and his place of residence in each case. Presented 27th April, 1909.—*Mr. Armstrong*.. .. ..*Not printed.*

150. Copy of an ordinance respecting the hearing and decision of disputes in relation to mining lands in the Yukon Territory. Presented (Senate) 5th May, 1909, by Hon. Sir Richard Cartwright.. .. ..*Not printed.*

151. Copy of an ordinance respecting the imposition of a tax upon ale, porter, beer or lager beer imported into the Yukon Territory. Presented (Senate) 5th May, 1909, by Hon. Sir Richard Cartwright.. .. ..*Not printed.*

152. Return to an order of the House of Commons, dated 11th February, 1909, for a copy of all communications, accounts, reports and other papers received by the Department of Public Works from A. Edgar Hanson, E. T. P. Shewan, or other person or persons, relating to the survey of the St. John River channel between Fredericton and Woodstock, and of all letters, instructions, &c., from the department to Mr. Hanson, Mr. Shewan, or other person or persons in connection therewith. Presented 7th May, 1909. —*Mr. Crocket*.. .. ..*Not printed.*

153. Return to an address of the House of Commons, dated 22nd March, 1909, for a copy of all orders in council directing that repairs be made on different wharfs in the county of Soulanges, a copy of all correspondence, reports, accounts and pay-rolls relating to the valuation of these works, the payment and the list of names of all who were employed as day labourers on these works; a copy of all letters, reports and recommendations exchanged between the Government and all other perons relating to the choice of men to be engaged on these works and those who should be refused employment; a copy of the report of accounts produced by Mr. Alfred Bissonette, wharfinger at St. Zotique, and Mr. Treflé Poirier, wharfinger on the wharfs of the canal and River St. Lawrence, in the parish of Des Cèdres, and of those of Mr. Isaïe Lalonde, son of Albert, farmer, of St. Zotique; a copy of accounts for furnishing wood, iron, cement, sand and stone used in the building of said wharfs, and also a statement of the materials purchased as aforesaid, paid for by the department, and which were not used because they were considered unfit for the building of these wharfs. Presented 11th May, 1909.—*Mr. Lortie*.. .. ..*Not printed.*

154. Return to an address of the House of Commons, dated 8th February, 1909, for a copy of all orders in council, correspondence, papers and other documents between the Government or any member thereof, and any person or persons, referring in any way to the drainage of the Nation River, running through the township of Matilda and Winchester, in the county of Dundas, from the year 1904. Presented 11th May, 1909.— *Mr. Broder*.. .. ..*Not printed.*

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155. Return to an order of the House of Commons, dated 5th April, 1909, showing the amount of money received from the Government by the *Canada Posten* of Winnipeg during the years 1907 and 1908. Presented 12th May, 1909.—*Mr. Bradbury*..*Not printed.*

156. Farming in Canada.—Report of the Scottish Commission on Agriculture in Canada, 1908. Presented 12th May, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

157. Return to an order of the House of Commons, dated 5th April, 1909, for a copy of all correspondence and reports respecting the Colonization and Repatriation Society of Lake St. John from 1900 to this date, and a detailed statement of the moneys paid to the society and of the manner in which they have been expended between these dates. Presented 14th May, 1909.—*Mr. Girard*.. .. ..*Not printed.*

158. Return to an address of the Senate, dated 19th March, 1909, calling for copies of all correspondence and documents from the Pacific Cable Board on the working and revenue of the Pacific cable and all information on the subject of a state-owned Atlantic cable and Empire cables generally. Presented 13th May, 1909.—*Hon. Mr. Belcourt*.. .. ..*Not printed.*

159. Return to an address of the Senate, dated 29th April, 1909, for copies of all correspondence between the Honourable Sir Frederick Borden, Minister of Militia and Defence, Mr. Crowe and others, relating to the admission of Newfoundland into the Dominion as a province of the same. Presented 13th May, 1909.—*Hon. Sir Mackenzie Bowell.*
Not printed.

160. Return to an order of the House of Commons, dated 5th April, 1909, for a copy of all documents, complaints, correspondence and decisions arrived at relating to a contract of lease entered into between Alphonse Laberge, lessor, and the Government of the Dominion of Canada, lessee, of date 20th day of July, 1904. Presented 14th May, 1909. —*Mr. Roy (Montmagny)*.. .. ..*Not printed.*

161. Return to an order of the House of Commons, dated 22nd March, 1909, for a copy of all correspondence, tenders and documents in connection with the construction of an ice-breaking steamer for Northumberland Straits, let to Messers. Vickers, Sons & Maxim; also the same in connection with the construction of a lighthouse tender and buoy steamer for the Great Lakes, by Messrs. Swan, Hunter, Wigham & Richardson. Presented 15th May, 1909.—*Mr. Currie (Simcoe)*.. .. ..*Not printed.*

162. Order in Council granting authority for the exemption from payment of the Chinese Capitation Tax in certain cases. Presented 17th May, 1909, by Sir Wilfrid Laurier.
Not printed.

163. Return to an order of the House of Commons, dated 3rd March, 1909, showing with respect to prosecutions since 1906 for violation of postal law, the nature of each offence alleged, the place of residence of person charged, and the result of each trial and penalty imposed. Presented 17th May, 1909.—*Mr. Taylor (New Westminster).*
Not printed.

164. Return to an order of the House of Commons, dated 8th March, 1909, for a copy of all reports, specifications, offers, tenders, contracts, alterations of contract, correspondence and documents of every description relating to or in connection with the contract of Thadee Desbiens for an extension to the Chicoutimi pier; and the same in connection with the contract of the General Construction Company, for work done by the dredge *Algonquin* at at near said pier. Presented 18th May, 1909.—*Mr. Ames*....*Not printed.*

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164*a*. Return to an order of the House of Commons, dated 8th March, 1909, for a copy of all petitions, reports, specifications, offers, tenders, contracts or papers, of any description in connection with the protection pier at Rivière du Moulin, near Chicoutimi; Saguenay County, P.Q. Presented 19th May, 1909.—*Mr. Ames*.. .. .. ..*Not printed.*

165. Return to an order of the House of Commons, dated 5th April, 1909, showing how many seining licenses for fishing in Pacific coast waters are now current; to whom they have been granted; the area covered by each license, and how many of these licenses are being operated by the original licensees, and how many by aliens. Presented 18th May, 1909.—*Mr. Cowan*.. .. ..*Not printed.*

165*a*. Return to an order of the House of Commons, dated 8th March, 1909, showing: 1. How many licenses to fish and pack lobsters in the coast waters of Prince Edward Island have been issued by the Dominion Government since 1st January, 1904, to this date, and to whom same were issued. 2. A copy of any petitions, requests, or correspondence received by the Government from any person or persons, or corporations since 1st January, 1904, asking for licenses to fish and pack lobsters in said province. 3. The number of new licenses likely to be issued by the Government during the present year. Presented 18th May, 1909.—*Mr. Fraser*.. .. ..*Not printed.*

165*b*. Return to an order of the House of Commons, dated 5th April, 1909, showing the names of all persons residing in the town of Liverpool, Nova Scotia, or in its vicinity, who were paid fishing bounties in the year 1908, and the names of all persons residing in Liverpool, Nova Scotia, or in the vicinity thereof, to whom seine trap licenses were issued in 1908, and the amounts paid for the same in each case. Presented 19th May, 1909.—*Mr. Crosby*.. .. ..*Not printed.*

166. Return to an address of the Senate, dated 18th March, 1909, calling for copies of all charges,—complaints made by Mr. Joseph Girard or others to the Prime Minister, or any member of the Government, against the Lake St. John Colonization Society. Presented 18th May, 1909.—*Hon. Mr. Tessier*.. .. ..*Not printed.*

167. Return to an order of the House of Commons, dated 8th March, 1909, for a copy of all correspondence, communications in writing and documents from the grand secretary, or any other officials of the Fishermen's Union of Nova Scotia, or any branch or station of the said union, to the Minister of Marine and Fisheries or to any official of the department, and the replies or communications from the minister or any official of the department since the 1st of January, 1907. Presented 19th May, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

168. Return to an order of the House of Commons, dated 13th January, 1908, showing all wharfs, piers, breakwaters, and other public works of a similar character which have been constructed at the expense of Canada, since 1st January, 1897, or for which public money has been voted or appropriated since that date, giving the amount expended or appropriated in each instance, the total cost of each such work, the estimated total cost in each case where the work has not yet been completed, the name of the place where the work is situated, the cost of annual maintenance and upkeep of each such work, and the amount of annual revenue derived therefrom in each instance. Presented 19th May, 1909.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

169. Return to an order of the House of Commons, dated 8th February, 1909, showing how many hogs have been killed during each month from the 1st of November, 1907, to 1st November, 1908, inclusive, by the following packing companies: the Laing Pack. and Prov. Co., Ltd., Montreal; the Collingwood Pack. Co., Ltd., Collingwood; the Williams Davis Co., Ltd., Harriston; the George Matthews Co., Ltd., Hull; the George Mat-

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thews Co., Ltd., Brantford, the George Matthews Co., Ltd., Peterborough; the Whyte Packing Co., Ltd., Brantford; the Canadian Packing Co., Ltd., London, and the number of hogs condemned, including intestines, during the same period. Presented 19th May, 1909.—*Mr. Beattie*.. .. ..*Not printed.*

170. Copy of correspondence between the Government of Canada and the British Government on the subject of Imperial Naval Defence. Presented 19th May, 1909, by Sir Wilfrid Laurier.. .. ..*Not printed.*

171. Return to an order of the Senate, dated 12th May, 1909, calling for copies of the petitions, letters patent and telegrams sent by the citizens of the parish, or of the township, and of the village of Laterrière, in the county of Chicoutimi, asking for a subsidy for the Ha-Ha Bay Railway Company, or any other railway company, to build a railway from Jonquière, or near thereto, to St. Alphonse. Presented 19th May, 1909.—*Hon. Mr. Choquette*.. .. ..*Not printed.*

CANADA

REPORT

OF THE

MINISTER OF PUBLIC WORKS

ON THE

WORKS UNDER HIS CONTROL

FOR THE

FISCAL YEAR ENDED MARCH 31

1908

Submitted in Accordance with the Provisions of Chapter 39, Section 34, of the Revised Statutes of Canada.

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1908

[No. 19—1909.]

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[No. 19—1909.]

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, G.C.M.G., &c., Governor General of Canada.

My Lord,

I have the honour to lay before Your Excellency the Report of the Department of Public Works of Canada, for the fiscal year ended March 31, 1908.

I have the honour to be,

My Lord.

Your Excellency's most obedient servant,

WILLIAM PUGSLEY,
Minister of Public Works.

Ottawa, December 28, 1908.

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" " harbour		18		78-192			
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Canning, N. S.				11			
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Canton Fabre, P.Q.		20					
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Cap de la Madeleine, P. Q.		20		109-227			
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Cap Rouge, P.Q.		20					
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Cape Auget, N.S.		15		11			
Cape Breton, N.S., telegraphs		28			8, 45		
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Cape Tormentine, N.B.		18		79			
Cape Traverse, P.E.I.		18		63			
Caplan, P.Q.		20		109			
Cape St. Mary, N.S.							
Caraquet, N.B.		18		80			
Caretakers, &c							37
Carleton, N.B., public building		32					
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Carleton Place, Ont., public building		10, 34					
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Cayuga, Ont., public building		10, 35					
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Charlottetown, P.E.I., public building		7, 32					
" " dredging		18		194			
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Chateauguay, P.Q.		20		110 228			
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" " wharf		20		110, 228			
" " telegraphs					9, 48		
" " dredging		20					
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" Architect's "			1				
" " staff		30					
" Engineer's report				1			
" " staff		30					
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Colborne, Ont.		24		156			
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" slides and booms dues		29					
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Côté, Alf., gratuity		30					
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Cumberland, Ont.		24		157			
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Digby, N.S.		15		15			
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Eatonville, N.S		15		16			
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" slides and booms		36					31
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" " public building		10, 35	20				
Fox Island, N.S		15		18			
Fraser, W. J., gratuity		30					
Fraser River, B.C		26		187			
Fraserville, P.Q., public building		8, 33					
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Fredericton, N.B., public building		8, 32	7				
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" River, P.Q., slides		29		328			
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" P.Q.		20		115			
Georgian Bay, Canal	9	30		339			
Goode, Dan., gratuity		30					
Gimli, Man.		25		181			
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" dredging		15		191			
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Grew Bar, N.B.		19		99			
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Halifax, N.S., graving dock		15					
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Hopewell Cape, N. B.		18		84			
" Hill, N. B		19		85			
Hopetown, P. Q.		20		117			
Hubbard's Point, N.S.		15		23			
Hudson, P.Q		20		228			
Hull, P.Q., wharf		20		117			
" public building		8, 33					
Humboldt, N.W.T., lands office		13, 37					
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Iberville, P.Q.		20		117			
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Indian Head, N.W.T., experimental farm		13, 37					
Ingersoll, Ont., public building		10, 35	21				
Inverness, N.S.		15					
" public building		7	5				
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Island of Orleans, telegraphs					50		
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Johnston Harbour, N.S.		16		25			
Jones' Harbour, N.S.		16		25			
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Kaministiquia River, Ont		24		234			
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Kennedy Flats, N.B.		19		98			
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Lake Dauphin, Man		25					
Lake Francis, Man				181			
Lake Megantic, P.Q		21					
" public building		8					
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Lake St. Francis, P.Q		21		119			
Lake Winnipeg, Man				312			
Lake St. John, P.Q		21					
Lambton, P.Q		21		119			
Lamèque, N. B		19					
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Lanoraie, P.Q		21		120			
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Margaretville, N.S.		16		34			
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" Harbour, N.S		16		37			
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" telegraphs		28					
New Campbellton, N.S		16					
New Carlisle, P.Q		22		125			
Newcastle, N.B., public building		8, 33	8				
" district slides		29				5, 12	
Newfoundland, telegraphs		28			12		
New Glasgow, N.S		16		39, 191			
" public building		7, 32	5				

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N							
New Harbour, N.S.		16		39			
New Liskeard, Ont.		24		235			
New London, P.E.I.		18		67			
Newport, P.Q.		22		126			
New Westminster, B.C., public building		14, 38	48				
Niagara Falls, Ont., public building		11, 35	24				
Nicola-Penticton, B.C., telegraphs					59		
Nicolet, P.Q.		22		126, 229			
" public building		9, 34	15				
Nominingue, P.Q., immigrant building		9, 34	15				
North Bay, Ont		24		164, 235			
" public building		11	24				
North East Harbour, N.S		16					
North Head, N.B.		19		89			
North River, N.S.		16		39			
North Shore, St. Lawrence, telegraphs		28			9, 48		
North Sydney, N.S., public building		7, 32					
North West Territories, buildings		13, 37	44				
" " bridges		30		335			
" " rivers				186			
" " public buildings		13, 34					
" " telegraphs					10		
Notre Dame du Portage, P.Q.		22		127			
Nova Scotia, dredging				190			
" harbours.		15		3			
" public buildings		7, 32	3				
" telegraphs		28			19		
Nyanza, N.S.		16		40			
O							
Oak Point, N.B		19		90			
Officers of the department							27
" employed on graving docks							35
" " slides and booms							33
Official correspondence							49
O'Leary, Thos., gratuity		30					
Ontario, bridges				335			
" dredging				232			
" harbours		24		153			
" public buildings		10, 34	19				
" telegraphs		28			10, 51		
Orangeville, Ont., public building		11, 35	24				
Orillia, Ont., public building		11, 35	24				
Oromocto, N.B.		19		193			
Oshawa, Ont., public building		11, 35	24				
" "		24		164			
Osoyoos, B.C., public building		14					
Ottawa, Ont., public buildings		11, 35	24				
" experimental farm		11					
" art gallery		11, 35					23
" buildings and grounds		11	30				
" government house		11	27				
" post office		11, 35	24				
" Ont., printing bureau		11, 35					
" river, dredging		24		235			
" slides and booms		29		327		3, 8	
" roads and bridges				334			
" streets, repairs			31				
Owen-Sound, Ont.		24		164-235			
" " public building		11	34				
Oyster Pond, N.S.		16		40			
P							
Pacific cable tariff					37		
Panmure Island, P.E.I.		18		67			
Papineauville, P.Q.		22		229			

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Paris, Ont., public building		11, 36					
Parker's Cove, N.S.		16	41				
Parkhill, Ont., post office, &c.		11					
Parliament buildings, Ottawa			24				
Parrsboro', N.S.		16		41			
Parry Sound, Ont.		24		165			
Partridge Island, N.B., quarantine				90			
Paspébiac, P.Q.		22		127			
Peel Head Bay, P.Q.		22					
Pelee Island, Ont		24		165			
" " telegraphs		28			10, 51		
Pembroke, Ont., public building		11, 36					
Penetanguishene, Ont.		24		235			
Percé, P.Q.		22		127			
Pereaux, N.S.		16		42			
Peribonka, P.Q., immigration building		9, 34					
" river, P.Q.		22					
Perron, T. A., gratuity		30					
Perth Ont., public buildings		11					
Petewawa river, slides		29		329			
Peterborough, Ont., public buildings		11, 36	35				
Petites Bergeronnes, P.Q.		22		128			
" Bonaventure, P.Q.		22		127			
" Rivière, P.Q.		22					
" Rivière, N.S.		16					
" Rivière, St. Anne, P.Q.		22		42			
Petit Rocher, N.B.		19		91			
Petrolea, Ont., public building		11, 36	35				
Philipsburg, P.Q.		22		128			
Phinney's Cove, N.S.		17		43			
Piché Point, P.Q.		22		128			
Picton, Ont., public building		11, 36					
Pictou Island, N.S.		16		43			
Pictou Bar, N.S.		16		191			
Pictou, N.S.		16		191			
Pictou, N.S. public buildings		7, 32	5				
Pierreville, P.Q.		22		166			
Pike Creek, Ont				92			
Pitt River, B.C.		26					
Pink Rock, N.B.		19					
Plessisville, P.Q., post office		9					
Plympton, N.S.		17		45			
Pointe à Brousseau, P.Q.		22					
Pointe à Côte, P.Q.		20		108			
Pointe à Elie, P.Q.		21		129			
Pointe aux Trembles, P.Q.		22					
Pointe Basse, P.Q.		21					
Pointe Cavignale, P.Q.		22		229			
Pointe Claire, P.Q.		22		129			
Point du Chêne, N.B.		19		92			
Point Edward, Ont		24		166-235			
" N.S., quarantine		7					
Pointe Piche, P.Q.		22		128			
Point Prim, P.E.I.		18		68			
Pointe Valois, P.Q.		22		130, 229			
Point Wolfe, N.B.		19		92			
Point St. Charles, P.Q., post office		33					
Pointe St. Pierre, P.Q.		22		129			
Poirierville, N.S.		17		44			
Poltimore, P.Q., post office		9					
Pomquet River, N.S.		17		44			
Pork Rapids, Ont		24					
Portage la Prairie, Man., public building		12, 37					
Porter's Lake, N.S.				44			
Port Arthur, Ont	6	25		167-235			
" " public building		11, 36	36				
Port Bruce, Ont.		25		167			
Port Burwell, Ont.		25		167-235			

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Port Purwell, Ont., engineer's office		36					
Port Colborne, Ont	6	25		168			
" " public building		11, 36					
Port Daniel, P.Q		22		130			
Port Dufferin, N.S		17					
Port Elgin, Ont		25		168-236			
Port George, N.S		17		45			
Port Hawkesbury, N.S		17		46			
Port Hilford, N.S		17		46			
Port Hood, N.S		17		46			
Port Hope, Ont		25		169			
" " public building		11, 36	36				
Port Maitland, N.S		17		48			
Port Morien, N.S				13, 192			
Port Mouton, N.S		15					
Port Mulgrave, N.S		17		192			
Portneuf, P.Q		17		130			
" (Saguenay)		21					
Port Royal, N.S		22		48			
Port Rowan, Ont		17		169			
Port Stanley, Ont		25		169, 236			
Port St. Francis, P.Q		25		131, 229			
Porter's Lake, N.S		22					
Portuguese Cove, N.S		17		48			
Pownal, P.E.I		17		68, 194			
Prescott, Ont		18		236			
" public building		25					
Prince Albert, N.W.T., public building		11, 36					
Prince Edward, Island, dredging		13, 38		194			
" " harbours				60			
" " public buildings		18	10				
" " telegraphs		7, 32					
Printing and stationery		28					
Properties purchased and sold		14					17
Public buildings, Alberta			46				
" British Columbia		13, 37	47				
" Manitoba		14, 38	40				
" New Brunswick		12, 37	7				
" Nova Scotia		8, 32	3				
" N.W.T.		7, 32	44				
" P.E.I.		13, 37	10				
" Ontario		7, 32	19				
" Quebec		10, 34	11				
" Saskatchewan		8, 33	44				
" Yukon and generally	10	13, 37					
Public Works Agency, B.C		14, 38					
Pugwash, N.S		30					
		17					
Q							
Quaco, N.B				93			
Qu'Appelle, N.W.T., telegraphs		19			26		
Quatsino, B.C		28		188			
Quebec, dredging		26		232			
" bridges							
" harbours		30		104			
" public buildings		20	11				
" telegraphs		8, 33					
" City, public buildings		28	15				
" " harbour		9, 34		131, 229			
Quesnelle, B.C., telegraph office		22, 39					
Quisibis, N.B		14		98			
		19					
R							
Rabbit Island, N.S		17		49			
Rainy River, Ont		25		170, 236			
Rama, Ont		25		170			

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Rat Portage, Ont., post office		36					
Rays Creek, N.S.		17					
Recapitulation		31					
Red Deer, Alta., public buildings		13, 38					
Red Head, N.S.				49			
Red Point, P.E.I.		18		68			
Red River, Man.		25		182, 312			
Regina, Sask., public buildings		13, 38	45				
Renfrew, Ont. "		11	36				
Rented buildings, Ottawa		11				36	
Rents received						6	
" paid		36	33				
Repentigny, P.Q.		22		131			
Revelstoke, B. C., custom house		14					
Richard's Landing, Ont		25		171			
Richibucto, N.B		19		94			
" public building		8, 33	8				
Richmond, P.Q., ice piers		22		134			
" public building		9, 34	16				
Rideau Canal, Ont		25		229			
Rideau Hall, Ottawa		11	27				
Rigaud, P.Q.		22		132			
Rimouski, P.Q.		22		230			
" public building		9, 34					
Riverside, B.C.		26		188			
Rivière à la Pipe, P.Q.		22		134			
Rivière à la Puce, Ont.		25		171			
Rivière aux Renards, P.Q.		22					
Rivière Bas de Soie, P.Q.		22					
Rivière Batiscan, P.Q.		22		227			
Rivière Beaulieu, P.Q.		22					
Rivière Bécancour, P.Q.		22		227			
Rivière Blanche, P.Q.		22		135			
Rivière Blondelle, P.Q.		22		135			
Rivière Bonaventure, P.Q.		22					
Rivière Bourgeois, N.S.		17					
Rivière Châteauguay, P.Q.		20, 22		227			
Rivière Dorion, P. Q.		22					
Rivière du Lièvre, P.Q.		22, 29		135, 230			
Rivière du Loup (en bas), P.Q.		22		136			
" " (en haut), P.Q.		22		230			
Rivière Girard, P.Q.		22		136			
Rivière Godefroi, P.Q.		22		228			
Rivière Hébert, N.S.		17		49			
Rivière Jésus, P.Q.		22		230			
Rivière L'Assomption, P.Q.		22		228			
Rivière Maskinongé, P.Q.		22		229			
Rivière Nicolet, P.Q.				229			
Rivière Otonabee, Ont.		25					
Rivière Ottawa, Ont.		22					
Rivière Ouelle, P.Q.		22		137, 230			
Rivière Richelieu, P.Q.		22		133			
" " boom		29					
Rivière Sault au Mouton, P.Q.		23		149			
Rivière Saguenay, P.Q.		22		230, 333			
Rivière Saguenay, slides		29		333		5, 12	
Rivière St. Francis, P.Q.		23		134, 230			
River St. Francis, N.B.		19					
River St. John N.B.		19		94			
Rivière St. Louis, P.Q.		22		145			
Rivière St. Maurice, P.Q.		23		231			
" " slides		29		332		4, 11	
River Thames, Ont.		25		237			
Rivière Ticouabe, P.Q.		23					
Roads and Bridges		30		334			
Roberval, P.Q.		21, 23		137			
" immigt. bdg.		9, 34					
Robins Landing, Ont		25		69			

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R							
Robinson's, Island, P.E.I.		18		49			
Roches Point, Ont.		25		171			
Rockland, N.S.		17		236			
Rockliffe, Ont.		24					
Rondeau, Ont.		25		171, 236			
Rosseau, Ont.		25		172			
Rossland, B.C., public building		14, 38	48				
Rossport, Ont.		25		173			
Rosthern, N.W.T., immigrt. bdg.		13, 38					
Round Hill, N.S.		17		50			
Round Pond, P.E.I.		18		69			
Ruisseau Harbour, P.Q.		23					
Ruisseau Pelletier, P.Q.		23					
Rustico, P.E.I.		18		70			
S							
St. Alexis, P.Q.		23		138			
St. Alphonse de Bagotville, P.Q.		22					
St. André de Kamouraska, P.Q.		23		138			
St. Andrews, P.Q.		23		139, 231			
St. Andrews, N.B.		19		193			
St. Andrews, Rapids, Man.	8	26		182			
Ste. Angèle de Laval, P.Q.				139			
Ste. Anne du Saguenay, P.Q.		23		140			
Ste. Anne de la Pocatière, P.Q.		23		139			
Ste. Anne des Monts, P.Q.		23		140			
St. Antoine, P.Q.		23		231			
St. Blaise, P.Q.		23		141			
St. Bonaventure, P.Q.				141			
St. Boniface, Man., public bldg.		12	42				
St. Catharines, Ont., public bldgs.		11, 36					
St. Charles Borromée, P.Q.		23		142			
St. Charles de Limoilou, P.Q.		23					
St. Charles de Richelieu, P.Q.		23		141, 231			
Ste. Cunégonde, P.Q., post office		33					
St. Denis, P.Q.		23		231			
St. Edouard des Méchins				142			
Ste. Emélie, P.Q.		21		142			
St. Eustache, P.Q., post office		34					
St. Félicien, P.Q.		23		142			
St. François de Sales, P.Q.		23		143			
St. François, I.O.		23		143			
St. Fulgence, P.Q.		23		143			
St. Gabriel de Brandon, P.Q., post office		9					
St. Gédéon, P.Q.		21					
St. George, N.B.		19		99			
St. Henri, P.Q., public building		9, 34	14				
St. Hyacinthe, P.Q., public building		9, 34	16				
St. Ignace de Loyola, P.Q.		23		144			
St. Irénée, P.Q.		23		144			
St. Jean des Chaillons, P.Q.		25		144			
St. Jean, I.O.		23		144			
St. Jean Port Joli, P.Q.		23		145			
St. Jérôme, P.Q.		23		145			
" public building		9, 34	17				
St. John River, N.B.		19		94			
" Harbour, N.B.	6	19		193			
" public buildings, N.B.		8, 33	8				
St. John's, P.Q., public building		9, 34	17				
St. Joseph, Ont.		25		176			
St. Laurent, I.O.		23		145			
St. Louis du Mile End, P.Q., public building		33	14				
St. Marc, P.Q.		23		146, 231			
St. Mary's Bay, P.E.I.		18		70			
" River, N.S.		17		53			
" N.B.		19		99			

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S							
St. Mary's, Ont., public building		12, 36	37				
St. Mathias, P.Q.		23		147			
St. Maurice River, P.Q.		22		231			
" " slides		29		332		4, 11	
St. Méthode, P.Q.		21		147, 151			
St. Michel de Bellechasse, P.Q.		23		147			
St. Nicholas, N.B.		19		99			
St. Omer, P.Q.		23		148			
St. Paul de Joliette, P.Q.		22		148			
St. Peter's Bay, P.E.I.		18		71			
St. Pierre les Becquets, P.Q.		23		231			
St. Placide, P.Q.		23		231			
St. Prime, P.Q.		22					
St. Roch, P.Q., public building		33					
St. Siméon, P.Q.		23					
St. Stephen, N.B., public building		8, 33	9				
St. Sulpice, P.Q.		23		148			
St. Thomas, Ont., public building		12, 36	37				
St. Thomas de Pierreville, P.				148			
St. Timothée, P.Q.		23		149			
St. Valier, P.Q.		23		149			
St. Zotique, P.Q.		23					
Saguenay River, slides		29		333		5, 12	
" dredging				230			
" telegraphs		28					
Salmon Arm, B.C.		26		188			
" River, N.S.		17		50			
" " N.B.		19		97			
Sanford, N.S.		17		51			
Sandwich, Ont., public building		11, 36					
Sand Point, N.B.				193			
" Ont.		25		173			
Sarnia, Ont., public building		11, 36	36				
Saskatoon, Sask., public building		13, 38	46				
Saskatchewan, public buildings		13, 37	44				
" telegraphs		28					
Saugeen River, Ont.		25		174			
Saulnierville, N.S.		17		51			
Sault Ste. Marie, Ont.		25		173, 236			
Sault Ste. Marie, Ont., public building		11, 36					
Scotch Cove, N.S.		17		51			
Secretary, staff, salaries.		30					
Sedgwick, N.W.T., immigration building.		13, 38					
Selkirk, Man.		26		182			
" public building		12	42				
Severn River, Ont.		25		174			
Seymour Point, N.S.				39			
Shag Harbour, N.S.		17					
Sheet Harbour, N.S.		15		16			
Shelburne, N.S., public building		7	6				
Shellmouth, bridge, N.W.T.		30					
Sherbrooke, P.Q., public buildings		9, 34	17				
Shippigan Gully, N.B.		19		100			
Shippigan, N.B.		19		101, 193			
Shrewsbury, Ont.		25		174			
Sight Point, N.S.		17		52			
Simcoe, Ont., public building		11	37				
Skeena River, B.C.		26		188			
Skinner's Cove, N.S.		17		52			
Slides and booms.		29		327		38	
" " dues.						3	
" " officials						31	
Smith's Falls, Ont., public building		11, 36					
Sorel, P.Q.		23		149, 231			
" public buildings		9, 34	18				
South Lake, N.S.		17		52			
Souris, P.E.I.		18		71, 194			
" public building		7, 32					

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South Nation River, Ont.		25		175, 236			
South River, Ont.		25					
Springhill, N.S., public building		7, 32	6				
Spry Bay, N.S.		17		53			
Squateck, P.Q.		23		150			
Stanley Island, Ont.		25		176			
Stonehaven, N.B.		18		101			
Stratford, Ont., public building		11, 36	37				
Strathcona, Alta., immigration building		13, 38					
Strathroy, Ont., public building		11, 36	38				
Sturgeon Falls, Ont.		25		177, 237			
Summerside, P.E.I.		18		72			
" public building		7, 32	10				
Summerstown, Ont.		25		177, 237			
Superintendent of Telegraphs					1		
Surveys and Inspections		30					
Sussex N.B., public building		8, 33	10				
Swan Creek, Man.		26					
Swift Current, N.W.T., immigration bdg.		13					
Sydenham River, Ont.		25		177, 237			
Sydney, N.S.		17		53, 191			
" public building		7, 32					
" quarantine		17					
Sydney Mines, N.S., public building		7, 32					
T							
Tadousac, P.Q.		23					
Tancock Island, N.S.		17					
Tangier, N.S.		17		54			
Tariff, telegraph line					37		
Tatamagouche, N.S.		17		54			
Technical books of reference		30					
Telephones					11		
Telegraph lines, generally	12	28			1		
" " reports					1		
" " revenue					11		
" " staff		30			12		
Terrebonne, P.Q.		23		150			
" public building		9, 34					
Thessalon, Ont.		25		178, 237			
The Slough, Man.				182			
Thetford Mines, P.Q., public building		9, 34	18				
Thompson River, B.C.		26		189			
Thorah Island, Ont.		25		178, 237			
Thornbury, Ont.		25		178, 237			
Three Fathom Harbour, N.S.		17					
Three Rivers, P.Q.		23		151			
" public buildings		9, 34	18				
Tiffin, Ont.		24		237			
Tignish, P.E.I.		18		72			
Ticouabé, P.Q.		21		151			
Tiverton, N.S.		17		54			
Tobique, River, N.B.		19		97			
Toney, River, N.S.		17					
Toronto Junction, Ont., public building		12					
" Ont., harbour		25		179, 238			
" public buildings		12, 36	38				
Total expenditure of Department	3	31					
Tracadie, N.B.		19		102			
" Lazaretto		8, 33	10				
Tracadie, N.S.		17		55			
Transportation	4						
" Commission	4						
Treadwell, Ont.		25		179			
Trent-Newcastle, slides							5
Trenton, Ont.		25		233			

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Trois Pistoles, P.Q.		23		151			
Trout, River, N. B.		19		98			
Truro, N. S., public buildings		7, 32	6				
Tynemouth Creek, N.B.		19		102			
"*Tyrian*" S.S. Cable Ship		28			10		
U							
Uncollected dues, slides and booms						8	
V							
Valleyfield, P.Q., public building		9, 34					
Vancouver, B.C., public buildings		14, 38	49				
Vancouver-Salt Spring, telegraphs		28					
Varennes, P.Q.		23		152			
Vaudreuil, P.Q		23		232			
Verchères, P.Q.		23					
Vermillion, N.W.T., immigration building		13, 38					
Vernon River, P.E.I		18		73			
Vernon, B.C., post office		14					
Victoria, B.C.		26		318			
" public buildings		14, 38	49				
Victoria-Cape Beale, telegraphs		28			30, 57		
Victoria, P.E.I.		18		194			
Victoria Harbour, N.S.		17		55			
" Ont.		25		238			
Victoriaville, P.Q., public buildlng.		9, 34					
Vigreville, N.W.T., immigration building		13					
Ville Marie, P.Q.		23		232			
Virden, Man., immigration building		37					
W							
Walkerton, Ont., public building		12, 37	40				
" custom house		12					
Wallace, N. S.		17		55			
Wapsehegan, N.B.		19		98			
Waterpowers	8						
Waubaushene, Ont.		25		238			
Weedon, P.Q.				152			
Welland, Ont., post office		12					
Wendover, Ont.		25		180			
West Arichat, N.S.		17		56			
Westbourne, Man.		26					
West Dover, N.S		17		57			
West Farnham, P.Q., public building		8, 34					
West Head, N. S.		17		57			
Westmount, P.Q., post office.		34					
West Point, P E.I		18		73			
West Pubnico, N. S.		17		57			
Westville, N.S		7	7				
Whitby, Ont., post office		12					
White Cloud Island, Ont		25		181			
White Head, N.S.		17		58			
Whitehorse, Y.T., post office.		38					
White Mud River, Man		26		312			
White Point, N.S.				51			
Whycocomagh, N S.		17		58			
Wiarton, Ont		25		181, 238			
Williams Head, B.C.		26		189			
" quarantine		14, 38	50				
Wilson's Beach, N.B.		19		103			
Windsor, N. S.		17		58, 192			
" public building		7, 32					
Windsor, Ont., public building		12, 37					
Wingfield Basin, Ont		25		238			

Name of places, &c.	Part 1. Page	Part 2. Page	Part 3. Page	Part 4. Page	Part 5. Page	Part 6. Page	Part 7. Page
W							
Wingham, Ont., public building		12, 37	40				
Winnipeg River, Ont.		25		314			
" Man.		26					
Winnepegosis, Man.		26		313			
Winnipeg, Man., public buildings		12, 37	42				
Woburn, P.Q.		21		152			
Woodstock, Ont., public building		12, 37	40				
" N. B., public building		8, 33	10				
Woods and Long Lake Canal, B.C.		26		189			
Wood Islands, P.E.I.		18		74			
Wolfe Island, Ont.		25					
Y							
Yamaska River, P.Q.		23		232			
" lock and dam				59, 326			
Yarmouth Bar, N.S.				60			
" N.S.		17		192			
" " public building		7, 32					
York Bridge, Ont.		30		335			
Yorkton, Alta., public building.		13, 38					
Yukon, public buildings		14, 38	51				
" telegraphs		28			10, 60		

PART I

REPORT

OF THE

DEPUTY MINISTER OF PUBLIC WORKS

FOR THE YEAR ENDED MARCH 31

1908

REPORT

OF THE

DEPUTY MINISTER OF PUBLIC WORKS

FOR THE

FISCAL PERIOD ENDED MARCH 31, 1908

Department of Public Works,
Ottawa, December 28, 1908.

Hon. William Pugsley,
Minister of Public Works of Canada,
Ottawa.

Sir,—I have the honour to submit the report of the operations of the Department of Public Works during the fiscal year ended March 31 last.

EXPENDITURE.

The continued expansion of this large branch of the public service is shown by the Accountant's statement of expenditure for the fiscal year 1907-8, which reached a total of $11,199,384.94, an increase of $1,851,959.63 over that for the year 1905-6, which must be used for purposes of comparison as, owing to the change in the fiscal year, the preceding report for 1906-7 covered only a period of nine months. The details of the expenditure follow under the various divisions of departmental operation.

Harbour and river works	$2,447,882 02
Dredging and plant	3,344,306 56
Slides and booms	144,716 54
Roads and bridges	19,158 84
Public buildings	4,331,901 40
Telegraph lines	462,233 43
Miscellaneous	449,186 15
Total	$11,199,384 94

Reviewing the annual reports for the past few years, it is interesting to note, by comparison, the work of the department which has necessarily kept pace with the development of the country.

In the year 1897 the total expenditure was $1,744,654.21. This had grown by the year 1900 to the sum of $3,563,026.34. The total expenditure for 1904 reached $6,492,273.52, while the amount expended as given in detail above for the year 1908 amounted to $11,199,384.94.

REVENUE.

The revenue collected by the department, during the year under review, shows a total of $299,430.18, an increase of $38,115.51 over 1906, which, as was mentioned before, is the last year which it is possible to use as a basis of comparison. The details of the revenue are as follows:—

Slides and booms	$ 86,760 67
Graving docks	63,208 58
Rents	17,189 08
Telegraph lines	121,553 57
Casual revenue	10,718 28
Total	$299,430 18

With the exception of the casual revenue, each of the individual divisions of the revenue shows an increase over that of the preceding year. Taking the same years which were used for a comparison of the expenditure, we find that the revenue of the department shows a remarkably steady increase, progressing from $128,790.83 in 1897 to $133,562.92 in 1900, $273,062.59 in 1904 and $299,430.18 in 1908.

HARBOURS AND RIVERS.

The total expenditure in this branch of the service, including dredging, slides and booms and roads and bridges, amounts to $5,956,063.96. Of this amount $3,344,306.56 was expended in dredging for the improvement of harbours and navigable streams.

One of the greatest if not most important problems of a young country is that of transportation, and in the provision of adequate wharfage facilities at the different points of trans-shipment and the extension and enlargement of existing water routes, the work carried on by the Public Works Department is most closely identified with and of prime importance to the trade and commerce of the whole country.

For several years, the department has been systematically carrying on the improvement of the principal harbours on the Great Lakes, along the St. Lawrence waterway and on the Atlantic and Pacific coasts, and after a most exhaustive inquiry by the Royal Commission on Transportation lasting throughout the years 1903-4-5, it was most gratifying to find the policy of the department not only confirmed, but strong representations made urging its enlargement to include the establishment of national or free ports to be equipped after the most approved and modern methods for handling the export and import trade of Canada. The ports mentioned were Fort William and Port Arthur, Depot Harbour, Midland, Port Colborne, Kingston, Montreal, Quebec, St. John, N.B., Halifax, Sydney, Vancouver, Victoria and the termini on the Pacific

ocean of the Grand Trunk Pacific and the Canadian Northern railways. The improvement of these ports had already been proceeding, with as great a measure of expedition as circumstances would permit, as is demonstrated by the following statement of expenditure:—

	From 1899 to 1903.	From 1904 to 1908.
Montreal	$503,536 12	$520,410 48
Quebec	19,467 65	793,099 56
Port Arthur	53,268 87	469,811 50
Fort William	98,449 65	747,495 65
Depot Harbour	31,797 81	213,729 05
Midland	49,420 29	355,439 62
Port Colborne	445,829 06	444,939 72
Kingston	20,258 38	13,474 09
Sydney, N.S.	6,971 42	14,822 81
St. John (harbour only)	29,111 49	859,331 25
*Halifax	184,528 62	1,511,204 02
Vancouver	6,972 00	
Victoria	51,244 66	197,962 81

Owing to physical conditions and the establishment of settlements along the St. Lawrence which retarded the development of the country to the north, we have a long and comparatively narrow stretch of territory, extending three thousand miles from ocean to ocean by as many hundreds in width. It was, therefore, necessary to develop the channels of commerce from west to east, and vice versa.

This necessary development has been provided by the construction of three great lines of railway which tap the wheat fields of western Canada: the Canadian Pacific, the Canadian Northern and the Grand Trunk Pacific.

The problem of the transportation of Canadian products has been chiefly in connection with the handling of the vast crop of the northwest which, in 1908, amounted to 106,853,000 bushels, valued at $87,000,000, or $30,000,000 more than the crop of 1907. The grain is loaded either directly on the car during the period of harvest or stored in elevators at the railway stations to await means of transportation. The interior elevator capacity west of the Great Lakes is now 42,812,400 bushels, as against 39,734,000 in 1907. At the different ports of transhipment, storage is rapidly increasing. Fort William and Port Arthur now have terminal storage for 18,852,700 bushels; Goderich, Kingston and Owen Sound (C. P. R.), 2,296,000; Collingwood, Depot Harbour, Meaford, Midland, Prescott and Tiffin (G. T. R.), 7,449,000; Port Colborne, 800,000; Montreal, 3,250,000; Quebec, 1,250,000; St. John West, 1,000,000; St. John, 500,000; and Halifax, 500,000.

The department has been giving the closest attention to the improvement of all Canadian harbours, on the Great Lakes, which are now engaged in competing for the grain trade.

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* Intercolonial Railway terminal accommodation.

At Fort William, large dredging operations have been in progress during the past three years with the object of widening and deepening the Kaministiquia and Mission rivers to afford every facility to the large lake carriers to take cargoes at the various elevators. A depth of 22 feet has now been secured over a considerable stretch, and the further widening and the deepening of the channl to 25 feet is under serious consideration. The Grand Trunk Pacific Railway has purchased from the Indian Department quite a quantity of land at the mouth of the Mission river for the establishment of extensive terminals, and dredging is contemplated to provide the necessary turning basin and shipping berths.

The dredging at Port Arthur has also been carried to a depth of 22 feet, and a contract is at present under way for the construction of a new line of breakwater. This is being built in sections, and when completed in accordance with the scheme now projected will afford one of the most complete and commodious harbours on the Great Lakes.

At Goderich, the 500 feet of breakwater which was so severely damaged by storm was placed again under contract and the work is proceeding most successfully. Dredging has also been performed in the inner harbour to a depth of 19 and 20 feet. The elevator which was burned in 1904 has been reconstructed and is again in operation.

Coming to the Georgian Bay ports, additional dredging has been performed at Collingwood, Owen Sound and Midland, and the two great lines of railway, realizing that the route via Georgian Bay to Montreal is the most natural and the quickest, have begun the erection of large terminals: the Grand Trunk at Tiffin and the Canadian Pacific at Victoria Harbour, and the construction from these harbours to points on their main roads of double lines of railway with a four-tenths of one per cent grade, enabling the carrying of 40,000 bushels of grain in one train, which should result in so lessening the cost of transportation that they may compete approximately with rates charged by the canal route.

At Port Colborne, in 1898 there were no facilities, but in 1903 a breakwater 4,400 feet long was completed which has since been reinforced and improved. The Department of Canals has constructed and has now in operation a grain elevator of 800,000 bushels capacity permitting of trans-shipment from the large lake carriers to vessels of canal depth and to barges for transportation to Montreal.

The construction of the deep water wharf at Three Rivers has been brought to a successful termination and the new wharf at Pointe à Carey, Quebec, is proceeding most satisfactorily, a length of 1,460 feet having been completed at the close of the year under review.

At the port of St. John, N.B., the winter export and import business of which is developing with great rapidity, extensive dredging has been performed on the western side of the harbour, affording, at low tide, berths with 30 and 32 feet clear depth, accommodating the large *Empress* steamers of the Canadian Pacific Railway, the Donaldson and the Allan lines. A further systematic development of the west side

is about to be commenced and the department has under earnest consideration the establishment of an ideal deep water terminal in that part of the harbour known as Courtenay bay, where complete surveys are now being made.

It is well also to emphasize the fact that, in the construction of her national ports, Canada is profiting by the experience gained at the older harbours of Europe and is laying out, in each case, a comprehensive scheme of development, the commencement of which can be begun modestly as the means of a young country may permit but which can be added to uniformly from time to time as the development of the country proceeds and the needs of trade warrant.

From the above, it will be seen that Canada is fully conscious of the immense possibilities which the future holds for her, and that every effort which prudence and enterprise can suggest is being used to improve existing opportunities. It is most interesting to note what the results have been so far. There has been a vast increase in shipping from the Great Lakes to the sea; Boston and New York have lost the European grain trade to Montreal; St. John is now in a position to successfully compete with Portland for the winter trade, and the Canadian route is being recognized as the quickest and shortest for through transportation from Europe to Asia. The following statement shows in concise form the remarkable increase in the grain business handled through some of the Canadian ports during the season of 1908.

Shipped from:—	Wheat.	Oats.	Barley.	Rye.	Flax.	Corn.	Total Bushels.
Montreal	27,405,034	116,545	1,268,689	255,012	678,184		29,723,464
Fort William and Port Arthur	20,457,538	3,753,699	1,227,615		964,828		26,403,680
Collingwood	1,045,634	78,436				1,374,254	2,498,324
Depot Harbour	4,744,110	264,880	45,791	17,950		537,149	5,609,880
Saint John, N.B.	6,112,130	6,860	504,008				6,637,531
Midland and Tiffin							11,465,164
Kingston							11,834,925
Port Colborne							1,864,000
Fort William, and Port Arthur, Rail and Water							68,194,300

The receipts of wheat at Montreal were 30,843,373 bushels, and the quantity of flour shipped was 746,073 barrels.

It is estimated that the quantity of grain from the United States, passing through Montreal for shipment, amounted to about 8,000,000 bushels.

While zealous attention has been given to the more important ports in Canada's scheme of transportation, the department has not lost sight of the need of the lesser harbours along the Great Lakes, the St. Lawrence and the extensive coast line of the maritime provinces, which are quite as important from the standpoint of local shipping. Care has been taken to provide breakwaters, boat shelters and wharfs where required and to improve, by dredging, the channels leading to numerous shipping centres.

In referring to these works of lesser importance I may say that the department has not always been free from criticism of those constructed in the maritime provinces and along the Gulf of St. Lawrence, but such criticism is not justified when one con-

siders the immense benefits accruing to the fishermen and those engaged in the coasting trade, in whose interests they are built. In the province of Nova Scotia, for instance, the annual expenditure for the maintaining of such public works does not exceed $100,000, which is an inconsiderable sum when it is borne in mind that loss of life and property has thereby been reduced during the past ten years to a minimum. When harbours of refuge were distant, in some cases, twenty miles from the fishing grounds, it was difficult for fishermen to make a port, but with the construction of small protection works, coupled with information through the signal service, fishermen make for one of these harbours on the first sign of a storm. In the year 1889 the value of the combined fisheries of Nova Scotia, New Brunswick, Prince Edward Island and Quebec was $12,176,385; in 1893, $13,505,673; in 1898, $13,907,033; in 1903, $15,339,714; in 1906, $16,048,359, while in the last mentioned year there were employed 1,121 schooners, 31,245 small boats, valued at $2,919,800 and having other equipment to the value of $5,439,000. It will be readily seen, therefore, that for the expenditure made for the benefit of this most important industry, the return is a hundred-fold.

ST. ANDREWS RAPIDS.

A most important work under the charge of the Chief Engineer, and one which is probably unique on this continent, is the lock and dam under construction at St. Andrews Rapids, Man. The contract for the masonry portion of this large undertaking was let in the year 1906 to the well known firm of Montreal contractors, Messrs. Quinlan & Robertson, and is now fast nearing completion. The contract for the remainder of the work, the construction of a moveable dam and steel, service and highway, bridge, repair shop, &c., has recently been awarded to the Canada Foundry Co., Ltd., of Toronto, and it is expected that the close of another year will see the structure well on towards completion.

This improvement will provide continuous navigation from the city of Winnipeg to the large lake of the same name, a distance of forty-eight miles, and it is hoped will do much towards solving the fuel problem of the Prairie City, where coal is scarce and consequently dear, as well as providing easy means of shipment for the products of the quarry and the mine.

WATER-POWERS.

Before passing from this branch of departmental operation, I would like to make a brief reference to the question of water-power development in connection with works constructed by the department. As is well known, it is only within the last few decades that the opportunities existing in the way of utilizing watercourses for power purposes have come to be fully realized. Dr. Pinchot, chairman of the National Convention for the Conservation of the Natural Resources of the United States, is responsible for the statement that there is in that country sufficient developed and undeveloped water-power to run all the lines of railway, all the trolley lines, and to supply the needs of all the established industries.

If that be the case, Canada is quite as well if not better off in that respect, as the inroads made on her store of 'white coal' are as yet inconsiderable, when it is borne

in mind what remains to be utilized. Canadians have not been indifferent to the advantages to be derived from this magnificent heritage. The falls of Niagara are already harnessed to as great an extent as is possible, having regard to their retention as one of the scenic wonders of the world. Complete development may also be said to have taken place at Sault Ste. Marie; at the falls of Montmorency; the Shawinigan Falls on the River St. Maurice, the Lachine rapids at Montreal, the Chaudiere falls at Ottawa, the Kakabeka falls at Fort William, all these have now been made of practical account in turning the wheels of the many manufacturing concerns which have grown up, not only in their immediate neighbourhood but in some cases at considerable distances. Power has also been developed in connection with the different Canadian canals, notably the Welland, Cornwall and Beauharnois, which is leased by the Department of Railways and Canals for manufacturing and other purposes.

I am aware, sir, that you have at present under earnest consideration the question of a similar development to that which has taken place along the canals, in connection with the construction of some of the large and important dams which it falls to the Department of Public Works to build in the interests of navigation and for purposes of water conservation, and I firmly believe that the idea is one which will the more commend itself the greater the consideration it receives, and such development would without doubt become one of the principal assets of the department, increasing immensely its present sources of revenue.

GEORGIAN BAY CANAL.

A most comprehensive survey has now been completed of this very important and much discussed project, and before long a full report will be published. Detailed working plans were laid upon the table of the House during the last session of parliament, since when, the engineers in charge have been working out the more intricate problems relating to dam and lock construction and the conservation of water incidental to lockage at the height of land. In the meantime, I would call special attention to the interesting interim report prepared by Mr. Arthur St. Laurent, assistant deputy minister, to be found in pages 339 to 348, inclusive, of this volume.

In view of the fact that the grain trade of Montreal has now grown to be more extensive than that of New York, it is patent that Canada's waterways must be still further improved in order to maintain the supremacy of the St. Lawrence route over all its competitors. The belief is becoming more general that the grain, of both the Western States and Western Canada, *must* find its outlet via the great Canadian waterway.

DREDGING.

As stated above, the expenditure for the year 1907-8 in this field of the department's operations was $3,344,306.56. In the provinces of Ontario and Quebec, contracts were let and improvements carried on at the following places:—

Ontario.—Blind river, Bronté, Cobourg, Collingwood, Trenton, Goderich, Hamilton, Kincardine, Meaford, Midland, Tiffin, Owen Sound, Penetanguishene, Point Ed-

ward, Port Burwell, Port Elgin, Port Stanley, Rainy River, Rondeau, Sault Ste. Marie, Summerstown, Thames river, Thornbury, Toronto, Victoria Harbour, Wiarton, Wingfield basin and Waubaushene.

Quebec.—Batiscan river, Bécancour river, Blanche shoals, Chateauguay river, Dorion, Godefroi river, Hay island, Hudson, L'Assomption river, Maskinongé river, Nicolet river, Pointe Cavagnale, Port St. Francis, Raquette river, Rimouski river, River du Loup (en haut), River Jesus, River Ouelle, St. Andrews, St. Francis river, St. Maurice river, St. Pierre les Becquets, St. Placide, Saguenay river, Sorel, Vaudreuil, and Yamaska river.

The contract system was also extended during this year to the maritime provinces, where contracts were entered into for work at:

Nova Scotia.—Arisaig, Lunenburg, Mahone bay, Petpeswick, Port Dufferin, and Sheet Harbour.

New Brunswick.—St. John, Rodney Slip, and Sand Point.

In addition to the above a great deal of work was performed by the plant owned by the department, which now numbers thirty-one dredges with equipment. Their names, description and capacity will be found at page 320 of Part IV. of this volume.

The department has purchased and had refitted by the Polson Iron Works, Ltd., of Toronto, the dredge *Sir Wilfrid,* and has at present under contract the construction of three tugs, two with the Pontbriand Company, Ltd., of Sorel, and one with the New Burrill-Johnson Iron Works, of Yarmouth, N.S. In addition to this, steel scows of 200 to 500 yards capacity were constructed for the department: four by the Fleming Iron Works, of St. John, N.B.; two by I. Matheson, of New Glasgow, N.S.; two by the Burrill-Johnson Co., of Yarmouth, N.S.; two by the Polson Iron Works, of Toronto, Ont., and six by the Collingwood Shipbuilding Co., of Collingwood, Ont.

PUBLIC BUILDINGS.

Another important branch of the department is that which has to do with the construction and maintenance of the public buildings throughout the Dominion and which are under the charge of the Department of Public Works. The total expenditure in this connection during the year under review amounts, as stated at the beginning of this report, to the sum of $4,331,901.40, which covers not only the construction of new edifices, but all requirements connected with the maintenance of those already erected, their repair, heating, lighting, &c. During the year 1907-8 the following buildings were either begun or were in course of construction:—

Ontario.—Post office buildings at North Bay, Markham, St. Marys, Renfrew, a postal station at Toronto, Kincardine, Owen Sound and Simcoe, and a drill hall at Belleville and Hamilton, and armouries at Strathroy and Walkerton; at Ottawa the Victoria Memorial Museum, Cœlostat House and extension to the Parliament Buildings and the Supreme Court Library.

Quebec.—Post office buildings at Chicoutimi, Iberville, Lévis, St. Johns, Montmagny, Nicolet, Lachute and Magog; drill halls at Three Rivers, Sherbrooke, and cavalry stables at St. Johns; also post office extension at Montreal.

Nova Scotia.—Post office buildings at Antigonish, Canso, Inverness, Bridgewater, Glace Bay, Shelburne, Westville; custom house at Halifax, and a drill hall at Truro.

New Brunswick.—Addition to St. John military stores building.

Manitoba.—Public buildings at Neepawa, Selkirk, St. Boniface; an armoury at Brandon, and the new post office and examining warehouse at Winnipeg.

Saskatchewan.—Public buildings at Saskatoon, Maple Creek, Regina and Medicine Hat, and an armoury at Medicine Hat.

Alberta.—Public Buildings at Edmonton, and extension to Calgary post office.

British Columbia.—Post offices at Cumberland, Ladysmith and Fernie; an immigration hospital at Victoria, and the new public building at Vancouver.

Of the larger buildings which are at present in process of construction, and rapidly nearing completion: the addition to the general post office at Montreal, the addition to the Parliament Buildings at Ottawa, the Victoria Memorial Museum, the Toronto armoury addition, the Hamilton armoury addition, Guelph armoury, North Bay public building, Brandon armoury, Regina and Edmonton public buildings and the new post office at Vancouver are a distinct credit to the department and a lasting monument to the genius of the Chief Architect, Mr. David Ewart, I.S.O., and his staff of able assistants.

It is also the constant aim of the Chief Architect to keep all the public buildings, under his control, in the best possible condition that the appropriations placed at his disposal by parliament will allow. It is the duty of the caretakers, resident in the many buildings, to maintain the same in the most efficient state and to report regularly to the Chief Architect on repairs which from time to time become necessary. There is, I believe, but little general conception of the onerous task which the supervision of the public buildings in the Dominion, now numbering 380, involves. Every new structure adds its quota, and I do not know that any better illustration of the rapidly increasing charge, in respect of maintenance, can be given than to call attention to the expenditure made in this connection. In the year 1888 the cost of public buildings' maintenance amounted to $261,589.63; in 1898, $334,732.20; in 1903, $549,488.86, while by the year 1908 it had reached the sum of $932,447.63.

TELEGRAPHS.

The total number of miles of telegraph lines now under the control of this department is 7,225, comprising 393 offices, which transmitted during the year 1907-8 a total of 105,000 messages. All the lines have been maintained in good order and have worked fairly satisfactorily. No new lines of any considerable length have been constructed during the year, but a number of extensions have been made to existing lines in the

maritime provinces, the province of Quebec, particularly in the Chicoutimi district, and in the new provinces of Saskatchewan and Alberta.

From an examination of the report of the General Superintendent of Telegraphs, part 5, it will be noticed that the cost of maintenance exceeds the revenue, but the advantages accruing to the portions of the country served by these lines more than compensate for the expense borne by the Dominion. The great portion of the government telegraph lines is constructed through very sparsely inhabited districts and along the Gulf of St. Lawrence, where private companies would not obtain sufficient revenue to justify the inauguration and operation of a telegraph service.

The benefits enjoyed on the Atlantic by the shipping trade, the fishermen and the signal service, and in the Northwest by the settlers and the Mounted Police are incalculable, while the Yukon line is a necessity to keep that distant portion of the Dominion in reasonable touch with the remainder of Canada and the outside world.

As the country is opened up and railways built, many of the government telegraph lines will necessarily be abandoned or transferred to the control of railway and other companies; or the day may come when Canada will enjoy the advantages of a great postal telegraph system, and the telegraph branch will be transformed into an immense department.

In several instances, it has been found that the public interest is best served by transforming lines originally constructed as telegraph into telephone lines, the operation of which are much more simple and fulfil to a greater degree the needs of the community. In some cases, the dual operation of the line for both telegraph and telephone was attempted, but the results can hardly be said to be satisfactory.

INTERNATIONAL WATERWAYS COMMISSION.

This commission, which was organized in the spring of 1905, composed of representatives of the Canadian and United States governments, has accomplished highly important work in ascertaining a basis of settlement for a number of vexed questions in connection with the use of the boundary waters between the two countries. During the past year, an application to dam the St. Lawrence river near Cornwall has been under consideration but owing to the extensive and important interests involved, at your suggestion, the proposal was referred for investigation to the Chief Engineers of the Departments of Public Works, Railways and Canals, and Marine and Fisheries. A very careful study of the question has been made by these gentlemen, who have submitted a report which raises a number of material objections to the proposed scheme.

The commission is now engaged in delimiting the boundary line and marking same on modern charts, along the waters of the St. Lawrence from its intersection with the 45th parallel at St. Regis, through the Great Lakes and connecting rivers, to the mouth of Pigeon river.

Negotiations have also been carried on through the commission with the authorities

at Washington looking to the making of a treaty which will set out in permanent form the principles and arrangements agreed upon by the joint commission as a result of their investigations into existing conditions relating to international waters. The proposed treaty, it is expected, will also include some uniform regulations regarding the fisheries and the navigation of the Great Lakes, and it is anticipated will be ready shortly for ratification by the Imperial government and the government of the United States.

GENERALLY.

In part No. 2 of this report will be found the financial statement of the operations of the department prepared by the Accountant, Mr. A. G. Kingston. It comprises two divisions, 'A' and 'B.' 'A' giving in detail the expenditure in connection with the different buildings and harbour and river works under the headings of 'Construction and Improvements,' 'Repairs and Furniture' and 'Staff and Maintenance,' while part 'B' deals with the cost of the different services for each public building.

Part No. 6 contains the interesting report of the Collector of Revenue, and No. 7 statements prepared by the Law Clerk, giving the contracts let by the Department of Public Works from April 1, 1907, to March 31, 1908, property purchased or sold and property leased to or by the department during the fiscal year ended March 31, 1908.

During the year, the department lost the services, through retirement, of Mr. Antoine Gobeil, I.S.O., who had for a period of seventeen years held the position of Deputy Minister; he having practically severed his connection with the department on the 1st of January last, being granted six months leave of absence, at the expiration of which he was placed on the superannuated list. Mr. Gobeil had been connected with the department since 1872, and through his energy and manifest ability, gradually worked his way up to be its chief permanent executive officer. On March 12 last, he was the recipient of a marked testimonial of their regard from the members of the staff previous to his departure for Europe, whence he returned much improved in health. Mr. Gobeil now contemplates the opening of a law office in the city of Montreal, and his old-time associates will all wish him every possible success in the practice of a profession for which his manifold abilities so eminently fit him.

In conclusion, I desire to offer my sincere thanks to the staff and officers of the department for the zeal and success with which they have discharged the many onerous duties devolving upon them in carrying on the work of this very important branch of the federal service.

I have the honour to be, sir,
Your obedient servant,

J. B. HUNTER,
Deputy Minister.

Ottawa, December 28, 1908.

PART II

REPORT OF THE CHIEF ACCOUNTANT

FOR THE

FISCAL YEAR ENDED MARCH 31

1908

DEPARTMENT OF PUBLIC WORKS, CANADA,
ACCOUNTANT'S OFFICE,
OTTAWA, Dec. 26, 1908.

NAPOLÉON TESSIER, Esq.,
Secretary,
Department of Public Works,
Ottawa.

SIR,—I beg to submit the report upon the expenditures made by this department during the fiscal year ended March 31, 1908.

As in previous years, the report takes the form of three tabular statements, as follows:—

Statement A, showing the expenditure upon each work under the several heads of (1) construction and improvements, (2) repairs, (3) staff and maintenance. In treating of public buildings, as it is found desirable to give the cost of maintenance in greater detail, this information is shown in a second statement, as described below, the total cost of maintenance for each province being condensed to one item in statement A. In treating of harbours and rivers an additional column is devoted to the cost of dredging.

Statement B, showing separately for each building the cost of rent, salaries, heating, lighting and water.

Statement C, showing amounts advanced by government for the construction of certain works of a semi-public character, under statutory authority and after inspection by officers of this department.

The total expenditure during the fiscal year was $11,199,384.94.

The volume of work passed through the Accountant's Branch during 1907-8 may be briefly indicated as follows:—

—	Number of cheques issued.	Amount.
		$ cts.
Direct payment by departmental cheque—		
Issued by head office, Ottawa	53,404	4,327,470 25
" agencies	8,819	609,254 84
Total departmental cheques	62,223	4,936,725 12
Payment by Receiver General's cheque, after applications issued by this office, upon the Auditor General (contract work, &c.)	1,083	6,262,659 82
Total expenditure		11,199,384 94

I have the honour to be, sir,
Your obedient servant,

A. G. KINGSTON,
Chief Accountant.

STATEMENTS OF EXPENDITURE

DURING

FISCAL YEAR ENDED MARCH 31, 1908

STATEMENT A.—Showing the Amounts Expended by the Department of Public Works of Canada during the Fiscal Year ending March 31, 1908.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia.				
Amherst post office, &c		3,798 49		3,798 49
Annapolis "		49 45		49 45
Antigonish "	7,639 32	130 54		7,769 86
Arichat "		1 07		1 07
Baddeck "		84 00		84 00
Bridgewater "	2,448 08			2,448 08
Canso "	6,336 40			6,336 40
Dartmouth "		78 97		78 97
Digby "		32 16		32 16
Glace Bay "	5,826 11			5,826 11
Guysboro' "		101 39		101 39
Halifax appraiser's office		61 50		61 50
" cattle quarantine station		339 98		339 98
" custom house (new)	14,177 31	162 80		14,340 11
" immigrant building		2,770 42		2,770 42
" detention building	14,078 24			14,078 24
" Lawlor's Island, quarantine station (winter hospital)		3,876 84		3,876 84
" post office (formerly Dominion building)		6,765 98		6,765 98
Inverness post office, &c	9,727 60			9,727 60
Kentville "		14 11		14 11
Liverpool "		518 73		518 73
Lunenburg "		464 39		464 39
Nappan experimental farm		695 85		695 85
New Glasgow post office, &c		1,942 31		1,942 31
North Sydney "		84 97		84 97
Pictou custom house		62 98		62 98
" post office		503 50		503 50
Point Edward quarantine station		1,630 88		1,630 88
Shelburne post office, &c	146 35			146 35
Springhill "		71 07		71 07
Sydney "		141 89		141 89
Sydney Mines "		20 10		20 10
Truro armoury	8,873 34			8,873 34
" post office, &c		3,449 03		3,449 03
Westville "	3,608 25			3,608 25
Windsor "		6 40		6 40
Yarmouth "		177 79		177 79
Heating, lighting, water, &c., for all buildings in Nova Scotia (for details see page 32)			37,868 36	37,868 36
Totals, Nova Scotia	72,861 00	28,037 59	37,868 36	138,766 95
Prince Edward Island.				
Charlottetown post office, &c		3,209 18		3,209 18
" quarantine station		422 50		422 50
Montague post office, &c		91 73		91 73
Souris "	3,470 65			3,470 65
Summerside "		496 52		496 52
Heating, lighting, water, &c., for all buildings in Prince Edward Island (for details see page 32)			7,147 69	7,147 69
Totals, Prince Edward Island	3,470 65	4,219 93	7,147 69	14,838 27

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
New Brunswick.				
Bathurst post office, &c		63 65		63 65
Campbellton "		201 55		201 55
Chatham "		175 10		175 10
" quarantine station		239 84		239 84
Dalhousie post office		19 75		19 75
Fredericton drill hall	439 50			439 50
" post office, &c		678 33		678 33
Marysville "		167 45		167 45
Moncton "		1,499 26		1,499 26
Newcastle "		544 10		544 10
Richibucto "		471 05		471 05
St. John custom house		1,899 50		1,899 50
" immigrant building		881 07		881 07
" military stores building	3,301 61			3,301 61
" Partridge Island quarantine station	11,504 40			11,504 40
" post office		988 73		988 73
" savings bank		227 93		227 93
" West post office		46 69		46 69
St. Stephen's post office, &c		545 50		545 50
Sussex "		92 30		92 30
Tracadie lazaretto	10,600 32	62 10		10,662 42
Woodstock armoury	1,100 00			1,100 00
" post office, &c		384 85		384 85
Heating, lighting, water, &c., for all buildings in New Brunswick (for details see page 32)			32,508 67	32,508 67
Totals, New Brunswick	26,945 83	9,188 75	32,508 67	68,643 25
Quebec.				
Actonvale post office, &c		149 86		149 86
Athelstan "		337 55		337 55
Aylmer "		388 85		388 85
Berthierville "		826 22		826 22
Buckingham "		23 85		23 85
Chicoutimi "	7,370 62			7,370 62
Cookshire "	31 35			31 35
Coaticook "		1,407 47		1,407 47
Drummondville "		891 35		891 35
Dundee custom house		352 60		352 60
Grosse Isle, quarantine station improvements	12,646 83			12,646 83
" disinfecting apparatus, including building	6,283 26			6,283 26
Farnham post office, &c		30 25		30 25
Fraserville "		1,493 63		1,493 63
Granby "		36 38		36 38
Hull "		49 20		49 20
Hochelaga "		136 20		136 20
Iberville "	5,619 84	1 05		5,620 89
Joliette armoury	40 00			40 00
" post office, &c		149 58		149 58
Knowlton "	341 80			341 80
Lachine "		124 63		124 63
Lachute "	393 56			393 56
Lake Megantic "	31 75			31 75
Laprairie "		410 87		410 87
L'Assomption "		0 25		0 25
L'Epiphanie "		94 50		94 50
Lennoxville, cattle quarantine station		135 00		135 00
Lévis post office, &c	11,154 79	181 53		11,336 32
Longueuil "	1,576 45	40 75		1,617 20
Magog "	470 73			470 73
Marieville "	41 65			41 65

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
Quebec—Continued.				
Montmagny	7,457 38	3 00		7,460 38
Montreal, assistant receiver general's office		2,962 40		2,962 40
" custom house		5,399 26		5,399 26
" " power for elevator			27 50	27 50
" examining warehouse		22,096 67		22,096 67
" " power for elevators			433 29	433 29
" new examining warehouse	10,165 00			10,165 00
" immigration office		299 49		299 49
" inland revenue office		1,197 03		1,197 03
" post office (main)	273,470 60	30,463 27		303,933 87
" " power for elevators			3,440 01	3,440 01
" pneumatic tube system between general post office and new postal stations	1,546 10			1,546 10
" new postal station B, St. Catherine St. West	30,159 85	153 73		30,313 58
" station C, 226*a*, Amherst	2,943 41	23 85		2,967 26
Nicolet post office, &c	10,863 64			10,863 64
Nominingue immigrant building	1,649 50			1,649 50
Peribonka "	133 75	14 50		148 25
Plessisville post office, &c	2,843 75			2,843 75
Pointe St. Charles post office, &c		221 40		221 40
Poltimore "		162 00		162 00
Quebec Citadel, Governor General's quarters		1,998 20		1,998 20
" drill shed, school of gunnery	169 90			169 90
Quebec custom house		798 90		798 90
" drill hall, addition to building and levelling ground	1,000 19			1,000 19
" examining warehouse		2,305 08		2,305 08
" King's wharf building (marine signal service, cullers, gas inspector, weights and measures offices)		843 01		843 01
" immigrant buildings, repairs		2,615 32		2,615 32
" " hospital for trachoma	37,377 68			37,377 68
" post office		5,957 87		5,957 87
" " power for stamp machine			242 57	242 57
" Dominion arsenal stores building	18,185 23			18,185 23
" St. Roch's post office		1 91		1 91
Richmond armoury		1 15		1 15
" post office, &c		1,244 87		1,244 87
Rimouski "		6 06		6 06
Roberval immigrant shed		687 23		687 23
Sherbrooke drill hall	623 92			623 92
" post office, &c		1,211 56		1,211 56
Sorel "		676 78		676 78
St. Gabriel de Brandon post office, &c		135 00		135 00
St. Henri post office, &c	613 05	54 13		667 18
St. Hyacinthe drill hall	3,081 96			3,081 96
" inland revenue building	3 95	195 81		199 76
" post office	1,748 59	147 98		1,896 57
St. Jerome post office, &c		1,365 48		1,365 48
St. Johns "	15,030 90	423 80		15,454 70
" military buildings, stables for cavalry	12,693 94			12,693 94
St. Louis du Mile-End post office, &c		580 40		580 40
Terrebonne post office, &c		6 73		6 73
Thetford Mines post office, &c		129 32		129 32
Three Rivers custom house		5,969 54		5,969 54
" drill hall	4,300 09	9 60		4,309 69
" post office		1,819 85		1,819 85
Valleyfield post office, &c		131 49		131 49
Victoriaville "		889 94		889 94
Heating, lighting, water, &c., for all buildings in Quebec (for details see page 33)			138,062 14	138,062 14
Totals, Quebec	482,065 01	100,465 18	142,205 51	724,735 70

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
Ontario.				
Alexandria post office, &c	3,096 47	43 16		3,139 63
Almonte "		714 49		714 49
Amherstburg "		40 70		40 70
Arnprior "		2,153 01		2,153 01
Barrie "	105 00	55 40		160 40
Belleville armoury	35,055 55			35,055 55
" post office, &c		1,327 04		1,327 04
Berlin "		1,168 15		1,168 15
Bowmanville "	110 00	40 92		150 92
Brampton "	105 00	462 69		567 69
Brantford drill hall	1,803 78			1,803 78
" post office, &c	3,999 86	151 00		4,150 86
Bridgeburg "	110 00	37 77		147 77
Brockville drill hall	54 54			54 54
" post office, &c		816 92		816 92
Burford drill hall		20 04		20 04
Carleton Place post office, &c	145 00	697 65		842 65
Cayuga "		163 79		163 79
Chatham armoury	11,514 52			11,514 52
" post office, &c		351 26		351 26
Clinton "		304 73		304 73
Cobourg "		398 03		398 03
Collingwood "		8 00		8 00
Cornwall "		350 15		350 15
Deseronto "		26 54		26 54
Dundas "		3 25		3 25
Fort William "		2,152 16		2,152 16
Galt "	2,123 96	386 35		2,510 31
Gananoque custom house		1,387 31		1,387 31
" post office		390 84		390 84
Glencoe post office, &c	1,283 02			1,283 02
Goderich "	105 00	147 26		252 26
Gore Bay Indian agency		196 21		196 21
Guelph armoury	35,149 18			35,149 18
" post office, &c	160 00	659 74		819 74
Hamilton drill hall	100,036 35			100,036 35
" custom house, &c		1,361 09		1,361 09
" " power for machinery			13 19	13 19
" post office	12,496 41	276 43		12,772 84
" " power for elevator			63 00	63 00
Havelock post office, &c		62		62
Hawkesbury "	220 00	1,213 84		1,433 84
Ingersoll "		755 46		755 46
Kenora "		177 01		177 01
Kincardine "	640 88			640 88
Kingston custom house		634 76		634 76
" examining warehouse		48 00		48 00
" inland revenue office		35 70		35 70
" post office		2,650 38		2,650 38
Kingston military buildings—				
Barracks for R. C. Field Artillery	8,176 67			8,176 67
New servants' quarters	9,477 24			9,477 24
Stables	469 91			469 91
Tête de Pont barracks—Alterations to A, C and E blocks	977 95			977 95
Leamington post office, &c	2,525 50			2,525 50
Lindsay "	110 00	869 84		979 84
London custom house		1,120 88		1,120 88
" drill hall and armoury		1 50		1 50
" military buildings, new store building	7,031 79			7,031 79
" post office	13,632 17	302 58		13,934 75
Markham post office, &c	1,153 21			1,153 21
Napanee "		521 23		521 23

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
Ontario—Continued.				
Niagara Falls post office, &c		968 56		968 56
North Bay "	28,160 82			28,160 82
Orangeville "		121 92		121 92
Orillia "	110 00	748 43		858 43
Oshawa "	1,778 28	106 30		1,884 58
Ottawa, astronomical observatory	12,819 96			12,819 96
" " power for machinery			157 20	157 20
" bacteriological observatory		722 59		722 59
" departmental buildings, reconstruction of Nepean stone facing		2,359 15		2,359 15
" departmental buildings, renewal of skylights	2,004 50			2,004 50
" Dominion archives building	21,497 47			21,497 47
" " power for elevator			95 00	95 00
" experimental farm	19,851 99	4,860 37		24,712 36
" Government printing bureau, electric motor machinery	13,961 53			13,961 53
" Major's Hill Park			9,173 93	9,173 93
" National art gallery	1,159 89		570 00	1,729 89
" new departmental buildings, site, &c	170,121 88			170,121 88
" Parliament buildings, improvements	128,892 04			128,892 04
" post office	16,249 72			16,249 72
" " power for elevator			490 05	490 05
" Rideau Hall improvements	4,658 04		25,288 58	29,946 62
" " grounds, $8,105.05; snow, $1,554.44; fuel and light, $8,500; watchman, $549			18,708 49	18,708 49
" Royal mint	219,899 84			219,899 84
" Supreme Court library	24,039 13			24,039 13
" Victoria Memorial Museum	196,133 75			196,133 75
" generally, steel fittings and furniture	99,064 15			99,064 15
" " Parliament grounds	1,076 45		13,099 33	14,175 78
" " power for elevators			3,852 20	3,852 20
" " removal of snow			4,411 76	4,411 76
" " repairs and furniture		215,086 06		215,086 06
" " telephone service			14,488 92	14,488 92
Owen Sound post office, &c	30,189 72	14 85		30,204 57
Paris "		144 10		144 10
Peterborough armoury	41,774 88			41,774 88
" custom house		736 71		736 71
" post office		787 18		787 18
Petrolea " &c	115 00	104 32		219 32
Park Hill drill hall		31 19		31 19
" post office, &c	145 00			145 00
Picton "		121 47		121 47
Pembroke "		16 00		16 00
Perth "		0 63		0 63
Port Arthur immigrant building		270 00		270 00
" post office, &c	1,261 99	100 65		1,362 64
Port Colborne "		283 15		283 15
Port Hope "		829 31		829 31
Prescott custom house		234 00		234 00
" post office		123 60		123 60
Renfrew post office, &c	5,254 01			5,254 01
Sandwich "	1,042 77	14 00		1,056 77
Sarnia "	10,505 61	9 20		10,514 81
Sault Ste. Marie post office, &c		430 98		430 98
Simcoe "	658 94			658 94
Smith's Falls "		142 07		142 07
Stratford armoury	2,548 51			2,548 51
" post office, &c		1,475 50		1,475 50
Strathroy armoury	276 06			276 06
" post office, &c		694 52		694 52
St. Catharines drill hall	1,525 30			1,525 30

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
Ontario—Concluded.				
St. Catharines post office, &c.	3,858 57	264 33		4,122 90
St. Mary's "	24,412 50			24,412 50
St. Thomas drill hall	898 34			898 34
" post office, &c		70 55		70 55
Toronto, assistant receiver general's office		155 44		155 44
" clerk of works office		62 23		62 23
" custom house, alterations and additions	9,266 99	503 19		9,770 18
" " power for elevator			219 62	219 62
" drill hall, additional accommodation	138,587 51	5 50		138,593 01
" examining warehouse		921 58		921 58
" inland revenue office		317 53		317 53
" immigrant building		21 52		21 52
" meteorological observatory	2,880 30			2,880 30
" post office		23,941 88		23,941 88
" " annex for custom parcels	519 84			519 84
Toronto, post office, power for machinery			280 48	280 48
" postal station A		236 59		236 59
" " power for machinery			267 75	267 75
" " B		30 55		30 55
" " C		227 31		227 31
" " E		5 33		5 33
" " F	21,177 06	373 29		21,550 35
" " G		602 49		602 49
" Junction post office, &c.	100 00	229 39		329 39
Trenton post office, &c		43 50		43 50
Walkerton armoury	6,589 51			6,589 51
" post office, &c.		290 12		290 12
Walkerville custom house		327 35		327 35
Welland post office, &c.	6,378 05			6,378 05
Whitby "	5,155 42			5,155 42
Windsor "		563 89		563 89
Wingham "	420 45	1 00		421 45
Woodstock armoury	4,292 02			4,292 02
" post office, &c.	115 00	76 68		191 68
Heating, lighting, water, &c., for all buildings in Ontario (for details see page 34)			397,896 05	397,896 05
Totals, Ontario	1,533,297 75	285,431 93	489,075 55	2,307,805 23
Manitoba.				
Brandon drill hall	21,460 84			21,460 84
" experimental farm	52 50	1,969 72		2,022 22
" immigrant shed		220 40		220 40
" post office, &c		3,954 35		3,954 35
Dauphin Dominion lands office		172 25		172 25
" immigrant shed		15 25		15 25
" post office, &c	4,998 55			4,998 55
Emerson cattle quarantine station		2,271 74		2,271 74
" post office, &c	1,048 79			1,048 79
Gretna cattle quarantine	3,000 00			3,000 00
Neepawa post office	512 08	6 60		518 68
Portage la Prairie post office, &c.		117 40		117 40
St. Boniface post offics, &c.	15,080 82			15,080 82
Selkirk "	6,161 09			6,161 09
Winnipeg custom house		1,150 81		1,150 81
" examining warehouse		1,407 78		1,407 78
" immigrant building (new)	52,018 28	393 25		52,411 53
" " " power for machinery			121 78	121 78
" immigration building (old)		3,413 28		3,413 28
" " " power for machinery.			12 40	12 40

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
Manitoba—Concluded.				
Winnipeg Military District:—				
Quarters for non-commissioned officers	19,964 80			19,964 80
Stores building	246 00			246 00
Winnipeg post office (old)		4,838 07		4,838 07
" " power for machinery			69 00	69 00
" new post office	113,739 79	131 57		113,871 36
" post office north of C. P. R. track	35,175 26			35,175 26
Heating, lighting, water, &c., for all buildings in Manitoba (for details see page 37)			37,168 45	37,168 45
Totals, Manitoba	273,458 80	20,062 47	37,371 63	330,892 90
Saskatchewan and Alberta.				
Battleford Dominion lands office		161 50		161 50
" immigrant shed		50 40		50 40
Calgary Dominion lands office		154 49		154 49
" engineer's office		1 30		1 30
" immigrant shed		103 86		103 86
" post office, &c	55,869 52	1,433 08		57,302 60
Coutts cattle quarantine station		258 18		258 18
Duck Lake immigrant building		20 30		20 30
Edmonton Dominion lands and registry office	2,636 28	194 75		2,831 03
" immigrant building	2,463 49	22 58		2,486 07
" post office, &c	129,991 82	3,406 57		133,398 39
Estevan Dominion lands office	3,110 03	196 50		3,306 53
Humboldt " "		333 95		333 95
" post office, &c	21 90			21 90
Indian Head experimental farm	32 09	348 83		380 92
" forestry station	844 68			844 68
Lethbridge court house and custom house		111 67		111 67
" experimental farm	6,765 07			6,765 07
" immigrant shed		17 35		17 35
" post office		109 40		109 40
Lloydminster immigrant shed		622 50		622 50
Macleod custom house		306 15		306 15
Maple Creek post office, &c	202 71			202 71
Medicine Hat armoury	162 36			162 36
" post office, &c	11,166 66	186 71		11,353 37
Moosejaw immigrant building		10 00		10 00
" post office, &c		6,400 43		6,400 43
Moose Mountain cattle quarantine station		146 90		146 90
North Battleford immigrant building	2,585 00			2,585 00
Prince Albert Dominion lands and registry office		36 35		36 35
" immigrant building		26 10		26 10
" penitentiary	29,430 80			29,430 80
" post office, &c	4,507 78	424 57		4,932 35
Red Deer court house and Dominion lands office	3,185 75	15 00		3,200 75
Regina clerk of works office		17 25		17 25
" Dominion lands office		915 60		915 60
" immigrant building		89 08		89 08
" post office and custom house	100,052 44	1,313 51		101,365 95
Rosthern Dominion lands office		8 60		8 60
Saskatoon immigrant building		279 01		279 01
" post office, &c	5,428 22	416 65		5,844 87
Sedgewick immigrant building		38 50		38 50
Strathcona "		130 00		130 00
Swift Current "	2,750 00			2,750 00
Vigreville "		24 00		24 00
Vermilion "	2,760 00			2,760 00
Yorkton Dominion lands office		36 60		36 60

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
PUBLIC BUILDINGS—*Continued.*	$ cts.	$ cts.	$ cts.	$ cts.
Saskatchewan and Alberta—Concluded.				
Yorkton immigrant building		3 50		3 50
" post office, &c	4,061 70			4,061 70
Heating, lighting, water, &c., for all buildings in Saskatchewan and Alberta (for details see page 37)			41,826 08	41,826 08
Totals, Saskatchewan and Alberta	368,028 30	18,371 72	41,826 08	428,226 10
British Columbia.				
Agassiz experimental farm	101 50	280 05		381 55
Atlin post office, &c		78 50		78 50
Cumberland post office, &c	243 33			243 33
Darcy Island leper station	2,999 00			2,999 00
Fernie post office, &c	30,494 28			30,494 28
Kamloops "		447 88		447 88
Ladysmith "	253 22			253 22
Nanaimo "		371 70		371 70
Nelson "	939 40	128 05		1,067 45
New Westminster drill hall	122 92			122 92
" post office		477 38		477 38
" fisheries and Indian office	2,210 42	85 50		2,295 92
Osoyoos cattle quarantine station		540 00		540 00
Quesnelle telegraph office	2,000 00			2,000 00
Revelstoke custom house		415 55		415 55
Rossland armoury	133 00			133 00
" post office, &c		587 25		587 25
Vancouver custom house		1,412 61		1,412 61
" immigrant shed		601 75		601 75
" post office, &c. (old)		3,551 60		3,551 60
" " (new)	99,244 67	120 20		99,364 87
Vernon post office, &c	5,040 55			5,040 55
Victoria cattle quarantine station		386 20		386 20
" marine and Indian offices		298 13		298 13
" immigration building, including site	14,373 13			14,373 13
" post office, &c	1,508 20	2,675 43		4,183 63
" " power for elevator			253 80	253 80
" old post office		122 19		122 19
William's Head quarantine station	1,099 27	202 50		1,301 77
Heating, lighting, water, &c., for all buildings in British Columbia (for details see page 38)			29,952 19	29,952 19
Totals, British Columbia	160,762 89	12,782 47	30,205 99	203,751 35
Yukon Territory.				
Dawson Commissioner's office	3 50			3 50
Heating, lighting, water, &c., for all buildings in Yukon Territory (for details see page 38)			74,255 60	74,255 60
Totals, Yukon Territory	3 50		74,255 60	74,259 10
PUBLIC BUILDINGS GENERALLY.				
Advertising tenders for coal, Dominion buildings			1,701 88	1,701 88
Printing, stationery, instruments, travelling, &c			21,115 10	21,115 10
Salaries of resident clerks of works			17,165 57	17,165 57
Totals, Public Buildings Generally			39,982 55	39,982 55

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia.					
Amaguadees Pond			149 88		149 88
Amherst Point wharf		3,656 03			3,656 03
Annapolis, repairs to Queen's wharf			1,381 77		1,381 77
" Ice piers		382 80			382 80
Arisaig breakwater			1,059 22		1,059 22
Avonport			49 89		49 89
Baddeck wharf		11,709 33			11,709 33
" River improvements		1,090 47			1,090 47
Bailey's Brook			133 69		133 69
Barachois		805 46			805 46
Barrington passage, completion of wharf and extension of shed		399 07			399 07
Basswood Beach, protection work		1,997 99			1,997 99
Bayfield breakwater			1,799 47		1,799 47
Bay St. Lawrence boat harbour		183 00			183 00
Bear River		966 50			966 50
" Trap Cove			837 34		837 74
Beckerton			8 00		8 00
Big Bras d'Or			48 07		48 07
Blue Rock breakwater			199 88		199 88
Boisdale wharf		4,140 00			4,140 00
Bourgeois Inlet wharf		656 76			656 76
Breton Cove, extension of breakwater		136 27			136 27
Bridgewater	17,825 59				17,825 59
Broad Cove marsh			409 60		409 60
Cape Auget breakwater extension		1,853 60			1,853 60
Cape St. Mary breakwater extension		143 41			143 41
Charlo's Cove breakwater		13,229 55			13,229 55
Chebogue harbour			71 86		71 86
Cheticamp "			883 02		883 02
Church Point, repairs to wharf		1,999 36			1,999 36
Coffin's Island			179 90		179 90
Cow Bay (Port Morien)	3,996 56		11,509 28		15,505 84
Cribbin's Point			802 69		802 69
Culloden breakwater		6,175 00			6,175 00
Digby harbour improvements		4,801 93			4,801 93
Eagle Head			117 07		117 07
East River Sheet Harbour, shed		1,199 88			1,199 88
" " (Pictou Co.) survey	724 77				724 77
East Jeddore			847 70		847 70
Eatonville breakwater			2,998 06		2,998 06
Eskasoni wharf		3,102 50			3,102 50
Finlay's Point			274 93		274 93
Fort Lawrence		23,962 15			23,962 15
Fox Island, beach protection		999 03			999 03
Freeport			142 89		142 89
Friar's Head			396 90		396 90
French Village			150 02		150 02
Frude's Point, wharf enlargement		2,401 03			2,401 03
Georgeville wharf extension		1,182 75			1,182 75
Glace Bay	9,172 62	78 03			9,250 65
Grand Etang, channel protection works		3,959 90			3,959 90
Gros-Coques, pier repairs			1,980 70		1,980 70
Gros-Nez			231 01		231 01
Habitant River, wharf at Canning		3,996 29			3,996 29
Half-Island Cove breakwater		6,989 50			6,989 50
Halifax graving dock				10,000 00	10,000 00
Hall's Harbour			1,595 46		1,595 46
Harbour Bouche wharf		2,506 02			2,506 02
Hubbard's Point wharf		1,059 90			1,059 90
Inverness (Broad Cove), harbour improvements		70 60			70 60
Iona		230 10	369 70		599 80

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia—Con.					
Irish Cove, repairs to wharf			1,099 69		1,099 69
Jersey Cove or Eel Cove		4,844 13			4,844 13
Johnston's Harbour, reconstruction of wharf		240 05			240 05
Jones' Harbour, wharf renewal and extension		1,336 56			1,336 56
Judique boat landing		891 52			891 52
L'Ardoise, repairs to breakwater			993 81		993 81
LaHave channel			899 50		899 50
Larry's River			26 80		26 80
Litchfield breakwater		1,916 76			1,916 76
Little Brook, repairs to wharf			1,999 10		1,999 10
Little Harbour wharf		648 52	500 00		1,148 52
Liverpool, removal of rocks		992 50			992 50
Livingstone's Cove			1,800 00		1,800 00
Louisburg	3,342 16				3,342 16
Lower Selmah wharf		1,145 90			1,145 90
Lower Washabuck			150 39		150 39
Lunenburg	99,252 94		36 21		99,289 15
McKay's Point			306 80		306 80
McNair's Cove		2,317 21			2,317 21
McPherson's Cove (Great Bras d'Or) wharf		112 54			112 54
Mabou—Repairs to harbour works			2,000 00		2,000 00
Malagash wharf		2,099 50			2,099 50
Malignant Cove piling		1,030 17			1,030 17
Marble Mountain wharf		1,359 59			1,359 59
Margaree Harbour—Beach protection work		2,007 78			2,007 78
Margaree Island		1,185 52	225 95		1,411 47
Margaree River sheer dams, &c		735 44			735 44
Margaretville breakwater pier repairs			1,297 22		1,297 22
Meteghan River breakwater			128 33		128 33
Middle Country Harbour wharf		2,551 40			2,551 40
Middle River (lower)		5,488 25			5,488 25
" (upper)		2,089 79			2,089 79
Mill Cove breakwater pier		13,779 00			13,779 00
Modesty Cove			398 60		398 60
Moose Harbour breakwater		1,187 28			1,187 28
Morden			100 00		100 00
Morris Island			599 88		599 88
Musquodoboit Harbour ballast wharf (Ostrea Lake)		1,379 09			1,279 09
Neil's Harbour		998 88			998 88
New Campbellton, ballast wharf in Kelly's Cove		247 10			247 10
New Glasgow	3,166 40	115 73			3,282 13
New Harbour—To repair breakwater at Black Point			1,299 16		1,299 16
North East Harbour wharf		222 00			222 00
North River (Munro's Point)			40 01		40 01
" (St. Ann's)		2,395 30			2,395 30
Nyanza			426 44		426 44
Oyster Pond—Extension of breakwater		45 00			45 00
Parker's Cove improvements		1,682 50	144 25		1,826 75
Parrsboro' Harbour improvements		10,583 87			10,583 87
Pereaux (Delhaven)			860 21		860 21
Petite Rivière improvements		1,824 95			1,824 95
Pictou Bar	31,363 00				31,363 00
" Acadia Coal Co	474 01				474 01
" Copper Smelting Co	889 65				889 65
" Magdalen Island Co	347 29				347 29
" Island			318 69		318 69

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Nova Scotia—Con.					
Phinney's Cove		4,493 23			4,493 23
Plympton			600 00		600 00
Pomquet River			414 50		414 50
Poirierville landing pier		6,088 05			6,088 05
Portuguese Cove breakwater improvements		397 92			397 92
Port Dufferin	21,337 58				21,337 58
Porter's Lake			223 71		223 71
Port George breakwater			3,050 68		3,050 68
Port Hawkesbury			295 14		295 14
Port Hilford breakwater		6,326 56			6,326 56
Port Hood Harbour—Closing northern entrance		14,999 37			14,999 37
Port Hood wharf repairs			1,999 91		1,999 91
Port Maitland			199 61		199 61
Port Mouton			96 14		96 14
Port Mulgrave (Pirate Cove)	3,905 26				3,905 26
Port Royal (Madame Island)		428 45			428 45
Pugwash wharf		3,895 00			3,895 00
Rabbit Island breakwater		863 89			863 89
Ray's Creek			57 28		57 28
Rivière Bourgeois		1,242 14			1,242 14
Rivière Hébert			165 68		165 68
Rockland—Ragged Island, extension of wharf		1,000 00			1,000 00
Round Hill wharf		1,095 00			1,095 00
Salmon River breakwater		3,999 98			3,999 98
Sanford			200 00		200 00
Saulnierville wharf			2,500 00		2,500 00
Scotch Cove (White Point) breakwater		216 38			216 38
Shag Harbour			24 47		24 47
Sight Point breakwater		899 97			899 97
Skinner's Cove		822 37			822 37
South Lake (Lakevale)		5,871 18			5,871 18
Spry Bay			269 42		269 42
St. Mary's River			495 47		495 47
Sydney quarantine station			149 65		149 65
" I. C. R. Coal Co.'s pier	2,294 25				2,294 25
" Steel and Coal Co.	1,797 14				1,797 14
" Whitney pier	1,081 10				1,081 10
" Harbour, wharf on South Arm, near Whitney pier			47 03		47 03
Tancook Island breakwater on South East Cove		137 64			137 64
Tangier harbour wharf		2,080 89			2,080 89
Tatamagouche wharf		533 01			533 01
Three Fathom harbour			57 81		57 81
Tiverton			599 62		599 62
Toney River boat harbour		758 05			758 05
Tracadie			699 96		699 96
Victoria harbour			179 50		179 50
Wallace harbour			1,447 47		1,447 47
West Arichat wharf		2,232 29	100 24		2,332 53
West Dover			100 00		100 00
West Head (Cape Sable Island) wharf		5,000 00			5,000 00
West Pubnico			1,000 00		1,000 00
White Head			147 35		147 35
Whycocomagh			300 46		300 46
Windsor	6,499 40		6,174 07		12,673 47
Yarmouth	26,450 64	9,098 49			35,549 13
Generally	1,068 70			6,501 75	7,570 45
Totals, Nova Scotia	234,989 06	245,997 90	65,874 21	16,501 75	563,362 92

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Prince Edward Island.					
Bay Fortune			249 76		249 76
Belfast			1,002 60		1,002 60
Belle River harbour			2,178 99		2,178 99
Blooming Point			21 00		21 00
Brae harbour			656 47		656 47
Cape Traverse wharf			1,797 62		1,797 62
Chapel pier			199 39		199 39
Charlottetown (Marine and Fisheries) wharf	4,009 19				4,009 19
China Point pier			50 00		50 00
Clifton			203 28		203 28
Crapaud (Victoria)	5,294 37				5,294 37
Falconwood	1,302 67				1,302 67
Greek River			1,998 06		1,998 06
Haggerty's wharf			145 42		145 42
Hickey's pier			249 84		249 84
Higgin's Shore pier			1,223 81		1,223 81
McPherson's Cove wharf		1,306 08			1,306 08
Miminigash harbour			1,496 78		1,496 78
New London breakwater			991 06		991 06
Panmure Island wharf		1,500 33			1,500 33
Point Prim Island wharf		4,443 75			4,443 75
Pownal	5,636 42		599 83		6,236 25
Red Point wharf			100 19		100 19
Round Pond			50 00		50 00
Rustico harbour, Robinson Island (south side)		3,500 00			3,500 00
Rustico harbour breakwater (north side)			931 63		931 63
St. Mary's Bay			29 05		29 05
St. Peter's Bay breakwater (east side)		9,198 71			9,198 71
Souris harbour	16,262 15				16,262 15
" Knight's Point breakwater		2,573 30			2,573 30
Summerside harbour breakwater		30,640 00			30,640 00
Tignish			1,004 85		1,004 85
Vernon River bridge, approach to pier		2,607 09			2,607 09
West Point wharf			1,463 99		1,463 99
Wood Island harbour			2,574 30		2,574 30
Generally	534 37			1,264 63	1,799 00
Totals, P. E. Island	33,039 17	55,769 26	19,217 92	1,264 63	109,290 98
New Brunswick.					
Anderson's Hollow			474 82		474 82
Back Bay (Co. Charlotte)			196 17		196 17
Belle Isle (Hatfield's Point)	8,349 44				8,349 44
Buctouche Beach	184 09	3,500 00			3,684 09
" wharf			337 01		337 01
Campbellton	10,174 78				10,174 78
" wharf		6,655 02			6,655 02
Cape Tormentine			5,174 09		5,174 09
Caraquet wharf		2,105 49			2,105 49
Chatham			193 84		193 84
Chockfish, improvement of outlet		1,499 39			1,499 39
Clifton (Stonehaven)			2,030 00		2,030 00
Dalhousie harbour		22,348 79			22,348 79
Dorchester wharf		151 87			151 87
Durham "			177 10		177 10
Edgett's Landing wharf		2,662 05			2,662 05
Great Salmon river, groyne and breakwater combined		91 89			91 89
Hopewell Cape			72 91		72 91

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PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Totals.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
New Brunswick—Concluded.					
Hopewell Hill wharf			992 80		992 80
Lameque			10 00		10 00
L'Etang Harbour			400 95		400 95
Loggieville	4,888 04		399 02		5,287 06
Lord's Cove			241 54		241 54
Lower Newcastle wharf		2,901 81			2,901 81
Miramichi Bay	3,450 44				3,450 44
" river	5,659 17				5,659 17
Mill's Point wharf		149 78			149 78
Mispec breakwater		41 96			41 96
Moncton wharf		128 45			128 45
North Head breakwater (Grand Manan)		13,621 55			13,621 55
Oak Point wharf		7,806 00			7,806 00
Oromocto shoals	1,399 68				1,399 68
Petit Rocher breakwater		21,983 71			21,983 71
Pink Rock (Shepody Bay)		2,018 71			2,018 71
Point du Chêne breakwater			4,999 94		4,999 94
" Wolfe			491 86		491 86
Quaco Harbour, extension of east pier		133 08			133 08
Richibucto, extension of north pier		7,866 30			7,866 30
River St. John, including tributaries—					
Lower River St. John, snagging $ 1,411 05					
Salmon river 249 98					
Johnston's breakwater 391 54					
Grand Falls 150 00					
Little River dam 301 01					
Tobique river, main channel 169 00					
" Diamond Island 393 51					
" right hand channel 500 50					
" Waspehegan 154 36					
Bosse Island 91 20					
Kennedy's Flats 250 00					
Quisibis river 500 00					
Little Forks (Green river) 199 25					
Trout river 152 28					
River St. Francis 123 37					
Grew bar 100 11					
Generally 862 84					
		6,000 00			6,000 00
St. Andrews	14,297 33				14,297 33
St. George (Red Store) wharf			1,145 07		1,145 07
St. John Harbour, Navy Island bar	1,204 49				1,204 49
" Cushing's Mills	999 83				999 83
" I.C.R. wharf	62,779 00				62,779 00
" Sand Point and Rodney slip	525,427 16				525,427 16
" Negro Point breakwater			3,752 46		3,752 46
" channel, outer entrance	5,734 44				5,734 44
St. Mary's wharf		673 45			673 45
St. Nicholas river, Robertson's wharf		1,531 09			1,531 09
Shippegan Harbour	11,928 43				11,928 43
" (gully)		5,691 54			5,691 54
" wharf at terminus of Caraquet Ry		995 42			995 42
Tracadie			25 00		25 00
Tynemouth creek			300 00		300 00
Wilson's Beach (Campobello)			147 97		147 97
Generally	1,668 70			8,288 92	9,357 62
Totals, New Brunswick	657,545 02	110,557 35	21,562 55	8,288 92	797,953 84

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Quebec.					
Anse à la Barbe		2,708 21			2,708 21
" à Beaufils			39 94		39 94
" à Benjamin			1,014 06		1,014 06
" aux Gascons		3,999 82			3,999 82
" à Gilles			68 49		68 49
" aux Griffons			752 26		752 26
" à la Louise			25 00		25 00
" à la Roche			10 00		10 00
" à l'Islot		2,518 18			2,518 18
" du Cap (Cape Cove) breakwater		6,717 89	75 00		6,792 89
Baie des Bacons			201 34		201 34
" St. Paul, wharf at Cap aux Corbeaux		1,343 02			1,343 02
Barachois de Malbaie		8,698 88			8,698 88
Batiscan (R. & O. wharf)	13,888 24				13,888 24
Belœil			165 60		165 60
Berthier (en bas) wharf			998 12		998 12
Berthierville	438 10				438 10
Bic (old wharf)			467 39		467 39
Bic Harbour, wharf at Pointe à Côté		6,648 51			6,648 51
Black Cape (Campbell's Beach, Co. Bonaventure)			500 38		500 38
Breche à Manon			25 00		25 00
Cacouna			1,515 01		1,515 01
Canton Fabre wharf (Lake Temiscaming)		316 41	30 50	31 50	378 41
Cap à l'Aigle			60 75		60 75
Cap Chatte			428 02		428 02
Cap de la Madeleine	641 25		462 53		1,103 78
Cap des Rosiers			25 00		25 00
Cap Rouge (Co. Gaspé)			74 50		74 50
Cap Santé			19 30		19 30
Cap St. Ignace		12 00			12 00
Caplan			549 43		549 43
Carleton			21 80		21 80
Champlain wharf			831 27		831 27
Charlemagne	3,238 89				3,238 89
Chateauguay (*see* Rivière Chateauguay)					
Chicoutimi Harbour		9,596 48	1,139 10	40 00	10,775 58
Clarke City—Seven Islands		1,396 45			1,396 45
Coteau du Lac			43 00		43 00
Cross Point		6,996 70			6,996 70
Desjardins (Allumettes Island)			94 20		94 20
D'Israëli			388 40		388 40
Dorval	3,623 43				3,623 43
Doucet's Landing		5,500 25			5,500 25
Douglastown pier		3,890 67			3,890 67
East Templeton wharf		7,524 91			7,524 91
Escoumains pier		11,729 43			11,729 43
Father Point		3,408 07			3,408 07
Gatineau Point			23 02		23 02
Georgeville			110 64		110 64
Graham	81 00				81 00
Grandes Bergeronnes			204 14		204 14
Grande Grève			25 00		25 00
Grands Mechins		14,208 95			14,208 95
Grande Riviere de Beaupré		3,402 84			3,402 84
Grande Rivière de Gaspé			2,703 73		2,703 73
Grosse-Isle Quarantine Station wharf		23,993 94			23,993 94
Grosse Roche (Sacré Cœur)			415 11		415 11
Hopetown			497 46		497 46
Hudson	3,596 28		37 00		3,633 28
Hull wharf				183 00	183 00
Iberville			454 08		454 08

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Totals.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Quebec—Continued.					
Isle aux Coudres			946 54		946 34
" Foins	20,829 47				20,829 47
" Noix (St. Paul)			51 10		51 10
Isle Perrot wharf (north side)			1,012 65		1,012 65
" Verte		1,499 98	235 00		1,734 98
Jersey Cove (Co. Gaspé)			100 22		100 22
Kamouraska wharf			1,199 15		1,199 15
Knowlton's Landing			1,181 93		1,181 93
Lac Labelle			25 00		25 00
Lachenaie	54 00				54 00
La Fonderie			75 00		75 60
Lake Aylmer (Garth bay)		3,178 30			3,178 30
Lake Mégantic piers—					
Agnes Pier $ 1,079 42					
Moose Bay 1,537 44					
Woburn 385 55					
			3,002 41		3,002 41
Lake St. Francis (Beauce)—					
Lambton $ 4,257 95		4,257 95			4,257 95
Lake St. John piers—					
Mistassini $ 312 00					
St Gédéon 209 92					
St. Méthode 140 53					
Generally 1,773 89					
			2,436 34		2,436 34
Lake St. John dredging—					
Roberval $ 4,214 76	4,214 76				4,214 76
Lanoraie			417 55		417 55
Laprairie ice piers		329 96			329 96
La Tuque, wharf on River St. Maurice		3,502 02			3,502 02
Lavaltrie		3,609 77			3,609 77
Les Eboulements			3,005 25		3,005 25
Le Tableau, Descente des Femmes		996 68			996 68
Lévis Graving Dock				21,760 09	21,760 09
L'Ile d'Alma, removal of rocks		994 50			994 50
Longueuil wharf			4,213 83		4,213 83
Lotbinière and Portneuf Counties—					
Deschambault $ 331 10					
Grondines 47 15					
Lotbinière 446 69					
Portneuf 72 00					
Ste. Emélie 711 50					
Generally 13 25					
			1,621 69		1,621 69
Magdalen Islands breakwaters—					
Amherst $ 598 07					
Bassin 855 82					
Grindstone 1,580 35					
Pointe à Elie 5,079 19					
Pointe Basse 2,703 78					
Generally 1,158 26					
		11,975 47			11,975 47
Magog wharf			193 20		193 20
Malbay (Gaspé) boat shelter		673 27			673 27
Manche d'Epée (Co. Gaspé)			25 00		25 00
Marsouin		2,954 00			2,954 00
Matane breakwater		4,971 15			4,971 15
Mille Vaches		3,947 26			3,947 26
Mission Point (Co. Bonaventure)	2,935 76				2,935 76
Mont Louis			429 22		429 22
Montmagny, wharf in the basin		465 66			465 66
Montreal harbour		150,777 21			150,777 21
Murray Bay			4,938 35		4,938 35

PART II.—STATEMENT A.—EXPENDITTRE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Quebec—Continued.					
New Carlisle			4,334 30		4,334 30
Newport			185 04		185 04
Nicolet harbour	92 00		4,998 86		5,090 86
Notre Dame du Portage		2,399 37			2,399 37
Papineauville	586 65				586 65
Paspebiac wharf			6,079 33		6,079 33
Peel Head Bay		148 06			148 06
Percé wharf (North Cove)		9,813 87			9,813 87
Petites Bergeronnes		1,543 71			1,543 71
Petite Rivière Bonaventure			681 25		681 25
Petite Rivière (Gaspé)			50 00		50 00
" Ste. Anne			103 65		103 65
Philipsburg			580 63		580 63
Pierreville			500 15		500 15
Pointe à Brousseau		33 37			33 37
" aux Trembles (Portneuf)		5,885 21			5,885 21
" Cavagnale	10,039 40		563 80		10,603 20
" Claire			798 81		798 81
" Piché (Temiscaming)		366 28			366 28
" St. Pierre		382 52			382 52
" Valois			50 00		50 00
Port Daniel			699 22		699 22
Portneuf (Saguenay)			348 59		348 59
Port St. Francis	16,441 10		638 69		17,079 79
Quebec harbour	11,377 96	187,038 52			198,416 48
" custom house wharf			1,051 31		1,051 31
Répentigny		3,210 00	21 50		3,231 50
Rigaud	7 60	3,102 50			3,110 10
Rimouski wharf	11,300 87	29,647 60			40,948 47
Rivers Ashouapmouchouan and Peribonka—					
Peribonka $ 1,652 62					
St. Felicien 2,411 16					
St. Prime 829 07					
		4,892 85			4,892 85
Rivière aux Renards (Echourie)			50 00		50 00
" à la Pipe		3,994 71			3,994 71
" Bas de Soie			356 90		356 90
" Batiscan (Manitou Rapid)		746 15			746 15
" " (mouth)	4,503 30				4,503 30
" Beaulieu			219 55		219 55
" Becancour	13,319 25				13,319 25
" Blanche			100 00		100 00
" Blondelle		2,152 23			2,152 23
" Bonaventure		253 52	227 55		481 07
" Chateauguay	29,011 60		607 21		29,618 81
" du Lièvre lock	3,190 65		5,857 19	1,852 76	10,900 60
" Dorion	16,457 40				16,457 40
" du Loup (Fraserville)		7,998 04			7,998 04
" du Loup (en haut), dredging and improvements at mouth	20,382 28				20,382 28
" Girard			1,499 28		1,499 28
" Godefroi	9,610 70				9,610 70
" Jésus	13,512 92				13,512 92
" L'Assomption	8,481 16		856 23		9,337 39
" " (St. Paul de Joliette)			63 83		63 83
" Maskinongé	13,461 10				13,461 10
" Ottawa (Blanche shoals)	22,816 71				22,816 71
" Ouelle	24,923 25		4,411 24		29,334 49
" Richelieu, ice piers		1,046 22			1,046 22
" " improvements to prevent flooding of banks		1,351 35			1,351 35
" Saguenay, dredging	61,144 91				61,144 91

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Quebec—Concluded.					
Rivière Sault au Mouton			1,035 42		1,035 42
" St. Francis (Richmond)	40,553 52	1,565 82			42,119 34
" St. Louis, improvements	7,205 64		50 47	110 00	7,366 11
" St. Maurice, channel between Grandes Piles and La Tuque	16,146 59				16,146 59
" St. Maurice, dredging channels at mouth	14,861 00				14,361 00
" Tikouabé		1,230 83			1,230 83
Roberval wharf			1,000 91		1,000 91
Ruisseau Arbour			50 00		50 00
" Pelletier			200 07		200 07
St. Alexis wharf			984 23		984 23
St. Alphonse de Bagotville		411 65	60 37		472 02
St. André de Kamouraska		6,398 93			6,398 93
St. Andrews	23,435 06		200 00		23,635 06
Ste. Anne de Chicoutimi			1,003 65		1,003 65
" de la Pocatière		5,499 12			5,499 12
" des Monts		5,542 14	125 00		5,667 14
St. Antoine	1,561 27				1,561 27
St. Blaise		788 30			788 30
St. Charles Borromée		2,004 27			2,004 27
" de Limoilou		1,861 55			1,861 55
" de Richelieu	520 05	4,810 00			5,330 05
St. Denis	1,883 91				1,883 91
St. Félicien			377 71		377 71
St. François de Sales			735 24		735 24
" Island of Orleans		9,930 77			9,930 77
St. Fulgence		1,701 14			1,701 14
St. Ignace de Loyola		7,998 84			7,998 84
St. Irénée			267 90		267 90
St. Jean des Chaillons		13,435 96			13,435 96
" Island of Orleans		13,382 67			13,382 67
" Port-Joli			949 80		949 80
St. Jerome wharf		1,990 87			1,990 87
St. Laurent, Island of Orleans			14,986 16		14,986 16
St. Marc		834 32			834 32
St. Mathias			155 85		155 85
St. Michel de Bellechasse			399 04		399 04
St. Omer landing pier		2,631 82			2,631 82
St. Pierre les Becquets	12,411 83				12,411 83
St. Placide	29,039 63				29,039 63
St. Siméon		543 84			543 84
St. Sulpice wharf		4,260 96			4,260 96
St. Timothée			242 18		242 18
St. Valier		11,343 00			11,343 00
St. Zotique		918 35			918 35
Sorel (Ste. Anne)			587 65		587 65
" harbour	48,896 30	5,184 99			54,081 29
Squateck wharf (Temiscouata)		941 96			941 96
Tadousac wharf			15 35		15 35
Terrebonne			597 05		597 05
Three Rivers harbour		96,729 27			96,729 27
Trois Pistoles wharf			5,145 72		5,145 72
Varennes wharf		3,367 98			3,367 98
Vaudreuil	5,109 67				5,109 67
Verchères			202 86		202 86
Ville-Marie (Temiskaming)	3,190 00				3,190 00
Yamaska lock and dam			1,482 30	1,446 26	2,928 56
" River dredging	35,515 65				35,515 65
Generally	21,267 27			16,673 73	37,941 00
Totals, Quebec	605,799 38	790,060 22	106,393 84	42,097 34	1,544,350 78

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario.					
Amherstburg, improvement of channel	1,877 07				1,877 07
" wharf			403 40		403 40
Belle River, dredging channel	3,181 00				3,181 00
Belleville	889 80				889 80
Bayfield			449 90		449 90
Beaverton	5,998 75		1,533 00		7,531 75
Black River (co. Ontario)		700 00			700 00
Blanche River, improvement		7,839 54			7,839 54
" south branch		4,525 54			4,525 54
Blind River	15,535 82	5,489 01			21,024 83
Bronte	9,142 42				9,142 42
Bruce Mines			758 07		758 07
Burlington channel		1,675 52		2,002 68	3,678 20
Callendar wharf		809 61			809 61
Chute à Blondeau (co. Prescott)		995 64			995 64
Cobourg	21,290 88	4,299 46			25,590 34
Colborne wharf		368 11			368 11
Colchester			503 11		503 11
Collingwood harbour	26,487 34				26,487 34
" graving dock				15,000 00	15,000 00
Cumberland			346 43		346 43
Depot Harbour			3,145 00		3,145 00
Fort William (Kaministiqua River)	313,898 39				313,898 39
Goderich harbour, balance due Battle & Conlon		12,835 50			12,835 50
" improvements	28,534 53	5,194 13			33,728 66
Gore's Landing		379 55			379 55
Grand Bend			344 84		344 84
Grand River			25 00		25 00
Griffith's Island, Colpoys Bay		949 27			949 27
Haileybury (Lake Temiskaming)			722 45		722 45
Hamilton harbour	6,583 96	41,757 39			48,341 35
Hawkesbury	2,610 09				2,610 09
Jeannette's Creek	4,197 05	1,799 82			5,996 87
Kearney wharf (Muskoka)		756 61			756 61
Kincardine harbour	2,150 53		1,575 01		3,725 54
Kingston harbour	4,191 35				4,191 35
" graving dock				7,335 99	7,335 99
Kingsville			392 83		392 83
Lake Nipissing, Roller dam at head of French River		12,063 72			12,063 72
Lancaster			149 73		149 73
Leamington			1,989 42		1,989 42
Lion's Head		3,875 67			3,875 67
Little Current (Northern channel)	149,904 15				149,904 15
Mallorytown			277 55		277 55
Matchedash Bay—Channel between Fesserton and Waubauchene	265 65				265 65
McGregor's Creek (Barrack Point, Chatham)		660 51			660 51
Meaford Harbour	15,835 94	754 83			16,590 77
Midland Harbour	55,805 98				55,805 98
" Tiffin elevator	112,245 35				112,245 35
Montreal River (Pork Rapids)		303 64			303 64
New Liskeard	2,024 38		209 05		2,233 43
North Bay	1,154 67		1,226 21		2,380 88
Oshawa		900 00			900 00
Ottawa River (Rockliffe)	814 26				814 26
Owen Sound Harbour	20,813 65	12,740 50			33,554 15
Parry Sound		1,560 02			1,560 02
Pelee Island Wharf (North Bay)		5,003 80			5,003 80
Penetanguishene	13,576 08	80 40	256 50		13,912 98
Point Edward	39,370 32				39,370 32

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario—Continued.					
Port Arthur	35,958 30	53,000 00			88,958 30
Port Bruce			665 11		665 11
Port Burwell	2,083 77	8,185 31			10,269 08
Port Colborne		42,888 87			42,888 87
Port Elgin	2,800 00				2,800 00
Port Hope		5,183 55			5,183 55
Port Rowan			225 00		225 00
Port Stanley	9,581 09	29,470 00	5,257 09		44,308 18
Prescott	403 12				403 12
Rainy River	133 78				133 78
" " Long Sault Rapids		502 50			502 50
Rama			272 52		272 52
Richard's Landing			496 65		496 65
Rideau Canal (Hog's Back)	127 28				127 28
River à la Puce			217 79		217 79
River Otonabee	13,995 84				13,995 84
River Thames at Chatham		298 15			298 15
Roach's Point		1,456 40			1,456 40
Robin's Landing				25 00	25 00
Rondeau Harbour		4,937 86			4,937 86
Rosseau			518 68		518 68
Rossport Wharf (Lake Superior)		194 84			194 84
Sand Point Wharf (River Ottawa)		4,469 56			4,469 56
Saugeen River improvements	3,866 80	3,099 96			6,966 76
Sault Ste. Marie	49,999 87	4,266 90	383 50		54,650 27
Severn River—McDonald's Chute		1,019 31			1,019 31
" " Washago			33 00		33 00
Shrewsberry			49 43		49 43
Southampton—Chantry Island			2,860 09		2,860 09
" Repairs to town dock			557 49		557 49
South Nation River	251 68	15,658 62			15,910 30
South River	347 34				347 34
St. Joseph—Lake Huron			1,198 45		1,198 45
Stanley Island wharf			3,749 87		3,749 87
Sturgeon Falls	3,137 75		150 00		3,287 75
Summerstown	21,331 90		18 90		21,350 80
Sydenham River	1,634 06		343 70		1,977 76
Thessalon	117 50		494 41		611 91
Thorah Island	134 00		149 04		283 04
Thornbury	14,496 28		99 96		14,596 24
Toronto Harbour—Western entrance	62 50	765 53			828 03
" " Island breakwater		48,691 97			48,691 97
Treadwell		1,397 91			1,397 91
Trenton—Dark channel	30,861 36				30,861 36
Victoria Harbour	10,418 55				10,418 55
Waubaushene	16,372 41				16,372 41
Wendover			34 75		34 75
White Cloud Island		1,018 37			1,018 37
Wiarton	25,026 60	2,619 00			27,645 60
Wingfield Basin	220 00				220 00
Winnipeg River		7,708 21			7,708 21
Wolfe Island			5 00		5 00
Generally	3,484 40			11,562 84	15,047 24
Totals, Ontario	1,105,225 59	365,150 61	32,087 93	35,926 51	1,538,390 61
Manitoba.					
Gimli	1,238 05				1,238 05
Gypsumville	4,357 71				4,357 71
Lake Dauphin (Mossy River)	86 29				86 29
Red River, channel at mouth	10,243 06				10,243 06

PART II.—STATEMENE A.—EXPENDITURE—*Continued.*

Name of work.	Dredging.	Construction and Improvements.	Repairs.	Staff and maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Manitoba—Continued.					
Red River, St. Andrew's Rapids		261,613 95			261,613 95
" (West Selkirk)		899 73			899 73
Selkirk Wharf	2,620 77	1,428 86			4,049 63
Swan Creek	175 00				175 00
Westbourne	206 65				206 65
White Mud River	1,056 54				1,056 54
Winnipegosis, dredging channel, mouth of Mossy River	4,498 19				4,498 19
Winnipeg River, Manitou Rapids	545 71	576 62			1,122 33
Generally	64 59			3,803 72	3,868 31
Totals, Manitoba	25,092 56	264,519 16		3,803 72	293,415 44
Saskatchewan and Alberta.					
Last Mountain Lake		189 57	63 00		252 57
Lesser Slave Lake		35,972 53			35,972 53
Generally				4,968 84	4,968 84
Totals, Saskatchewan and Alberta		36,162 10	63 00	4,968 84	41,193 94
British Columbia.					
Clayoquot Wharf		1,999 90			1,999 90
Columbia River—					
Above Golden $ 3,114 90					
At Revelstoke 36,193 64					
		39,308 54			39,308 54
Coquitlam River		987 78			987 78
Courtney River			1,456 50		1,456 50
Esquimalt graving dock				13,664 49	13,664 49
Fraser River ship channel	50,145 00	27,365 72			77,510 72
" Cottonwood canyon		10,398 44			10,398 44
" Settlement of T. F. Sinclair's claim *re* Pitt River quarry		13,592 92			13,592 92
Fraser River Wharfs—					
McAdam's Landing $1,565 00					
Glen Valley 2,203 02					
Riverside 2,685 00					
		6,453 02			6,453 02
Kennedy Lake		27 81			27 81
Kootenay River, between Kootenay Landing and International boundary		2,425 02			2,425 02
Pitt River, alteration of draw-span of C. P. R. Bridge, &c		55,085 00			55,085 00
Quatsino Wharf		1,140 42			1,140 42
Salmon Arm Wharf		4,808 66			4,808 66
Skeena River		5,347 61			5,347 61
Thompson River		4,852 71			4,852 71
Victoria Harbour	33,000 00				33,000 00
William's Head quarantine station			9,961 97		9,961 97
Woods and Long Lakes, opening boat channel	4,999 23				4,999 23
Generally				5,793 27	5,793 27
Totals, British Columbia	88,144 23	173,793 55	11,418 47	19,457 76	292,814 01

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Dredging.	Construction and Improvements.	Repairs.	Staff and maintenance.	Total.
HARBOURS AND RIVERS—*Con.*	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Yukon Territory.					
Lewes—Yukon Rivers improvements		6,768 09			6,768 09
Harbours and Rivers Generally.					
General expenses of staff, &c.	4,626 97			10,176 39	14,803 36
DREDGES AND DREDGING PLANT.					
Maritime Provinces		179,009 64	*		179,009 64
Ontario—Quebec		196,871 39	92,813 86		289,685 25
Manitoba		20,815 81	3,627 22		24,443 03
British Columbia		75,030 00	21,676 66		96,706 66
Totals, Dredges and Dredging Plant		471,726 84	118,117 74		589,844 58

*A further sum of $20,194.41 expended for repairs to Dredges in the Maritime Provinces, considered as inseparable from working expenses, has been apportioned with the cost of dredging the various harbours in the Maritime Provinces.

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.
TELEGRAPH LINES.				
Newfoundland.				
Cape Ray (subsidy)			250 00	250 00
Nova Scotia.				
Cape Breton lines	218 75	3,852 10	18,053 17	22,124 02
Prince Edward Island.				
Prince Edward Island and Mainland (subsidy)			7,000 00	7,000 00
New Brunswick.				
Bay of Fundy line			1,688 21	1,688 21
Escuminac line			1,010 16	1,010 16
Quebec (Mainland).				
Father Point (subsidy)			500 00	500 00
North Shore St. Lawrence, east of Bersimis		6,629 10	18,101 51	24,730 61
" " " west of Bersimis		2,100 07	13,317 77	15,417 84
Saguenay River lines, northeast side	3,985 05			3,985 05
Quebec (Islands.)				
Anticosti line			2,973 89	2,973 89
Grosse Isle (two Marconi stations)	500 00	544 48		1,044 48
" " cable and wire line			4,332 80	4,332 80
Isle aux Grues, right of way	250 00			250 00
Magdalen Islands line			5,247 27	5,247 27
Cable Ship *Tyrian*			49,621 68	49,621 68
Generally, Gulf and Maritime Provinces			12,224 49	12,224 49
Ontario.				
Pelee Island		1,776 35	588 09	2,364 44
Saskatchewan and Alberta.				
Qu'Appelle-Edmonton-Athabaska	8,327 68		31,565 92	39,893 60
British Columbia and Yukon.				
Alberni-Cape Beale			9,944 00	9,944 00
Alberni-Clayoquot	1,225 20		3,834 27	5,059 47
Ashcroft-Dawson	7,952 55	4,571 76	196,997 08	269,521 39
Golden-Windermere			2,855 93	2,855 93
Kamloops-Okanagan	8,675 08		7,663 10	16,338 18
Nanaimo-Comox		2,000 65	3,542 18	5,542 83
Vancouver-Salt Spring-Pender Island line	3,187 23		139 82	3,327 05
" -Denman-Hornby Island line	2,821 95			2,821 95
Victoria-Cape Beale			6,018 12	6,018 12
Generally, B. C.			3,602 06	3,602 06
Telegraph service, generally			2,543 91	2,543 91
Totals, Telegraphs	37,143 49	21,474 51	403,615 43	462,233 43

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.
SLIDES AND BOOMS.				
River Richelieu			111 50	111 50
" Saguenay	1,479 52	151 97	4,504 78	6,136 27
" St. Maurice	23,385 23	8 88	72,678 10	96,072 21
Ottawa District.				
Black River		2,007 32		2,007 32
Dumoine River		37 75		37 75
Coulonge River		2,848 35		2,848 35
Gatineau River		1,953 67		1,953 67
Ottawa River		2,785 63	26,560 10	29,345 73
Petawawa River		2,756 36		2,756 36
River du Lièvre		7 00		7 00
Newcastle District		156 81	242 35	399 16
Collection of slide and boom dues			3,041 22	3,041 22
Totals, slides and booms	24,864 75	12,713 74	107,138 05	144,716 54

PART II.—STATEMENT A.—EXPENDITURE—*Continued.*

Name of Work.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.
ROADS AND BRIDGES.	$ cts.	$ cts.	$ cts.	$ cts.
Ontario and Quebec.				
Des Joachims bridge, Ottawa River		90 35		90 35
York bridge, Grand River		1,619 56		1,619 56
Ottawa City Bridges and Streets maintained by Government.				
Cartier Square		162 02		162 02
Chaudière bridges and approaches		4,168 61	1,720 50	5,889 11
Sappers and Dufferin bridges and Wellington Street	150 00		6,455 87	6,605 87
Lighting all the above			1,797 34	1,797 34
Northwest Provinces and British Columbia.				
Banff bridges, over Bow and Spray Rivers		752 41		752 41
Battleford bridge		113 75		113 75
Shellmouth bridge	2,128 43			2,128 43
Totals, Roads and Bridges	2,278 43	6,906 70	9,973 71	19,158 84
MISCELLANEOUS				
Cement testing laboratory	4,984 10			4,984 10
Surveys and Inspections—				
Georgian Bay survey to Montreal, waterway			71,783 82	71,783 82
Generally			74,878 88	74,878 88
Non-permanent staffs—				
Secretary and Accountant's Branch			68,817 05	68,817 05
Chief Architect's Branch			54,138 57	54,138 57
Chief Engineer's Branch			145,892 66	145,892 66
Telegraph Service Branch			10,899 91	10,899 91
Public Works Agency			1,470 50	1,470 50
Technical and other books of reference			537 91	537 91
Deep Waterways Commission			12,123 47	12,123 47
Grosse Isle quarantine station steamer, *Challenger*, reconstruction		48 00		48 00
Monument to memory of late Sir L. H. Lafontaine and late Hon. Robt. Baldwin	824 12			824 12
Gratuities—				
Gratuity to Miss M. Miller			191 66	191 66
" widow of late William Laurencelle			183 00	183 00
" " Jos. Dumoulin			100 00	100 00
" " W. J. Fraser			66 67	66 67
" " W. H. Butland			130 00	130 00
" " P. A. Perron			283 33	283 33
" " Alf. Côté			182 50	182 50
" " Thos. O'Leary			1,000 00	1,000 00
" " M. Costello			100 00	100 00
" " Dan. Goode			100 00	100 00
" " C. E. Macnaughton			450 00	450 00
Totals, Miscellaneous	5,808 22	48 00	443,329 93	449,186 15

PART II.—STATEMENT A.—EXPENDITURE—*Concluded.*

Name of Works.	Dredging.	Construction and Improvements.	Repairs and Furniture.	Staff and Maintenance.	Total.
RECAPITULATION.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Totals, Public Buildings –					
Nova Scotia		72,861 00	28,037 59	37,868 36	138,766 95
Prince Edward Island		3,470 65	4,219 93	7,147 69	14,838 27
New Brunswick		26,945 83	9,188 75	32,508 67	68,643 25
Quebec		482,065 01	100,465 18	142,205 51	724,735 70
Ontario		1,533,297 75	285,431 93	489,075 55	2,307,805 23
Manitoba		273,458 80	20,062 47	37,371 63	330,892 90
Saskatchewan and Alberta		368,028 30	18,371 72	41,826 08	428,226 10
British Columbia		160,762 89	12,782 47	30,205 99	203,751 35
Yukon		3 50		74,255 60	74,259 10
Public Buildings generally				39,982 55	39,982 55
Totals, Harbours and Rivers—					
Nova Scotia	234,989 06	245,997 90	65,874 21	16,501 75	563,362 92
Prince Edward Island	33,039 17	55,769 26	19,217 92	1,264 63	109,290 98
New Brunswick	657,545 02	110,557 35	21,562 55	8,288 92	797,953 84
Quebec	605,799 38	790,060 22	106,393 84	42,097 34	1,544,350 78
Ontario	1,105,225 59	365,150 61	32,087 93	35,926 51	1,538,390 64
Manitoba	25,092 56	264,519 16		3,803 72	293,415 44
Saskatchewan and Alberta		36,162 10	63 00	4,968 84	41,193 94
British Columbia	88,144 23	173,793 55	11,418 47	19,457 76	292,814 01
Yukon		6,768 09			6,768 09
Harbours and Rivers generally	4,626 97			10,176 39	14,803 36
Totals, dredges and plant		471,726 84	118,117 74		589,844 58
" slides and booms		24,864 75	12,713 74	107,138 05	144,716 54
" roads and bridges		2,278 43	6,906 70	9,973 71	19,158 84
" telegraph lines		37,143 49	21,474 51	403,615 43	462,233 43
" miscellaneous		5,808 22	48 00	443,329 93	449,186 15
Grand totals of expenditure	2,754,461 98	5,511,493 70	894,438 65	2,038,990 61	11,199,384 94

PART II.—STATEMENT B.—Showing the Cost of the following Services for each Public Building, &c. (the total for each Province being carried into statement 'A').

Name of Building.	Rents.	Salaries of and Supplies for Engineers	Heating.	Lighting.	Water.	Total.
Nova Scotia.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Amherst post office, &c		467 07	93 20	381 87	48 00	990 14
Annapolis post office, &c		366 63	226 57	147 00	40 00	780 20
Antigonish post office, &c		376 43	175 45	139 00	42 50	733 38
Arichat post office, &c		143 53	186 25	27 99		357 77
Baddeck post office, &c		240 88	214 00	23 25		478 13
Canso post office, &c		135 45	262 00			397 45
Dartmouth public building		229 13	83 39	93 78	27 40	433 70
Digby post office, &c		412 97	236 07	414 00	72 00	1,135 04
Guysboro post office, &c		68 85	259 25	53 62		381 72
Halifax Asst. Receiver General's office	1,210 00		104 27	80 92		1,395 19
" Appraiser's office (Exam. W.H).	1,000 00	465 84	249 86	80 07	66 17	1,861 94
" custom house (new)		2,510 06	840 86	973 72	15 54	4,340 18
" Dominion building		2,613 08	537 22	2,789 51	382 85	6,313 66
" drill shed		1,100 00				1,100 00
" engineer's office	187 00					187 00
" immigrant shed		556 00	785 02	1,695 20	455 10	3,485 32
" immigration detention building (Trachoma)			752 23	26 50	418 27	1,197 00
Kentville post office, &c		367 03	318 02	230 00	50 00	965 05
Liverpool post office, &c		393 17	142 02	166 54	18 00	719 73
Lunenburg post office, &c		294 60	207 75	141 85	59 00	703 20
New Glasgow post office, &c		375 81	21 91	330 23	100 00	827 95
North Sydney post office		374 54	6 00	865 64	32 00	1,278 18
Pictou custom house		4 86	21 75	51 27	25 00	102 88
" post office		509 71	29 10	168 43	25 00	732 24
Springhill post office, &c		433 00	272 35	233 35	30 00	968 70
Sydney post office, &c		478 93	245 00	1,577 65	58 00	2,359 58
Sydney Mines post office, &c		384 13	94 00	257 18	30 00	765 31
Truro post office, &c		377 43	19 50	284 58	30 00	711 51
Windsor post office, &c		403 40	275 48	168 00	75 00	921 88
Yarmouth post office, &c		366 63	292 50	513 20	72 00	1,244 33
Totals for Nova Scotia	2,397 00	14,443 16	6,951 02	11,905 35	2,171 83	37,868 36
Prince Edward Island.						
Charlottetown Dominion building		2,407 65	748 74	1,593 78	168 75	4,918 92
" engineer's office	294 00					294 00
Montague post office, &c		167 20	205 02	41 75		413 97
Souris post office, &c		339 66	147 00	2 50		489 16
Summerside post office, &c		405 39	429 12	197 13		1,031 64
Totals for Prince Edward Island.	294 00	3,319 90	1,529 88	1,835 16	168 75	7,147 69
New Brunswick.						
Bathurst post office, &c		423 92	55 54	938 85		1,418 31
Campbellton post office, &c		385 88	361 44	148 70	53 75	949 77
Carleton, St. John West, post office, &c		91 63	62 77	46 75	8 50	209 65
Chatham post office, &c	68 75	313 99	410 75	524 28	74 25	1,392 02
Dalhousie post office, &c		372 78	269 66	33 60		676 04
Fredericton post office, &c		397 33	348 20	1,073 46	51 00	1,869 99
Marysville post office, &c		141 25	166 02	39 79		347 06

PART II.—STATEMENT B.—EXPENDITURE—*Continued.*

Name of Building.	Rents.	Salaries of and Supplies for Engineers	Heating.	Lighting.	Water.	Total.
New Brunswick—Concluded.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Moncton post office, &c		398 65	431 02	590 38	134 00	1,464 05
Newcastle post office, &c		384 17	368 59	213 25	35 00	1,001 01
Richibucto post office, &c	28 66	386 38	318 35	226 75		960 14
St. John custom house		1,805 87	1,861 74	613 11	774 96	5,055 68
" cattle quarantine		333 00			251 25	584 25
" immigrant building		1,457 50	1,936 38	675 66	268 79	4,338 33
" post office		1,874 63	767 92	3,371 37	651 88	6,665 80
" savings bank		5 55	332 89	121 23	17 52	477 19
" West detention hospital			75 49			75 49
Tracadie lazaretto		240 00	1,172 45			1,412 45
St. Stephen's post office, &c		408 28	180 00	555 05	64 00	1,207 33
Sussex post office, &c		280 55	389 88	99 04	75 00	844 47
Woodstock armoury		350 00			25 00	375 00
" post office, &c		431 83	369 49	349 32	34 00	1,184 64
Totals for New Brunswick	97 41	10,483 19	9,878 58	9,530 59	2,518 90	32,508 67
Quebec.						
Acton Vale post office		385 96	56 06	260 35	24 00	726 37
Aylmer post office		103 03	242 93	190 00	33 00	568 96
Berthierville post office		7 04	140 22	121 56	32 50	301 32
Buckingham post office		115 25	293 72	130 16	27 90	567 03
Chicoutimi engineer's office	60 00					60 00
" post office, &c		333 30	455 00			788 30
Coaticook post office, &c		366 63	266 89	196 89	50 00	880 41
Drummondville post office, &c		398 99	268 75	93 11	22 00	782 85
" custom house	112 00					112 00
Dundee custom house			33 75			33 75
Fraserville post office, &c		409 61	415 50	90 83	200 00	1,115 94
Granby post office, &c		290 15	221 10	140 77	150 00	802 02
Hochelaga post office		189 26	197 29	164 07	60 14	610 76
Isle Verte engineer's office	70 00					70 00
Hull post office		137 50	337 50	330 62	244 65	1,050 27
Iberville post office		371 20	61 00			432 20
Joliette post office		407 37	344 09	156 45	108 00	1,015 91
Lachine post office		124 00	160 08	139 35	30 02	453 45
Laprairie post office		144 28	161 00	34 81	45 00	385 09
L'Assomption post office		237 75	174 00	160 85	50 00	622 60
Lévis post office, &c		124 19	234 53	120 64		479 36
Longueuil post office		302 02	173 50	141 90	25 45	642 87
Montmagny post office	276 00	176 09	223 75		37 50	713 34
Montreal building inspector's office	50 00					50 00
" civil service exam. office	100 00					100 00
" custom house	35 00	4,752 10	1,316 62	1,085 31	348 29	7,537 32
" Dominion public buildings	117 50	1,805 81			5 82	1,929 13
" drill hall		875 00				875 00
" engineer's office	1,175 75			11 51	35 00	1,222 26
" examining warehouse	72 50	11,974 18	1,813 11	3,244 66	793 56	17,898 01
" immigration office hospital	3,015 50		529 28	167 96	75 67	3,788 41
" inland revenue office		818 61	346 97	127 38	101 91	1,394 87
" post office (main)	197 00	17,484 51	1,589 41	18,724 94	867 24	38,863 10
" Pt. St. Charles L. C	456 67	11 30			9 00	476 97
" northern receiving house, 333 St. Lawrence	133 33		3 20	165 90		302 43
" station "C," eastern receiving house 226*a* Amherst	1,168 25	579 11	187 47	253 70	66 93	2,255 46
" station "B," St. Catherine west	2,377 21	111 33	250 07	33 74	46 62	2,818 97
" St. Cunegonde P. O., Richelieu street	1,750 00					1,750 00
" St. Louis du Mile End P.O.		566 42	169 00	462 74	32 00	1,230 16

PART II.—STATEMENT B.—EXPENDITURE—*Continued.*

Name of Building.	Rents.	Salaries of and Supplies for Engineers	Heating.	Lighting.	Water.	Total.
Quebec—Continued.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Montreal, 430 Wellington street			63 81	19 33		83 14
" Westmount, 190 Greene	625 00					625 00
" pneumatic tubes	1,600 00					1,600 00
Nicolet post office		17 90				17 90
Nominingue immigrant shed		391 50				391 50
Quebec Citadel buildings	17 00	502 50	609 69	195 04		1,324 23
" custom house		596 23	945 60	542 08	800 00	2,883 91
" engineer's office	304 50	206 00				510 50
" examining warehouse		1,440 88	842 72	85 50	450 00	2,819 10
" immigration building			943 78	2,027 78		2,971 56
" observatory				99 45	50 00	149 45
" post office	79 00	2,370 15	884 62	1,595 39	750 00	5,679 16
" Queen's wharf bldg. (marine, signal service, cullers, gas inspection, weights and measures)		499 05	1,328 91	90 00		1,917 96
" Trachoma hospital	225 00		1,162 91	348 15	100 00	1,836 06
" St. Roch post office			49 97	31 49		81 46
" G. T. R., 5. Duford	125 00					125 00
" St. Sauveur post office	350 00	106 67				456 67
Peribonka immigrant shed		275 00		5 10		280 10
Richmond post office, &c		362 59	469 21	69 85	25 00	926 65
" armoury				129 66		129 66
Rimouski post office		162 35	242 07	376 37	75 00	855 79
Roberval immigration shed		280 00	498 00	142 25	21 00	941 25
Sherbrooke post office, &c		612 62	491 35	427 31	50 00	1,581 28
Sorel post office, &c		515 10	427 96	921 08	250 00	2,114 14
St. Henri post office, &c		4 42	155 80	99 82	29 28	289 32
St. Hyacinthe post office, &c		478 53	233 84	471 27	75 00	1,258 64
" inland revenue		378 38	120 00	93 42	50 00	641 80
" drill hall		350 00	7 98			357 98
St. Jérôme post office, &c		378 63	318 00	266 45	54 00	1,017 08
St. Johns post office, &c		334 71	117 07	187 50	60 00	699 28
St. Eustache post office	144 00					144 00
Terrebonne post office, &c		284 25	177 00	116 89	15 00	593 14
Thetford Mines post office, &c		188 18	342 90	382 78	9 75	923 61
Three Rivers drill hall		437 04	40 00			477 04
" custom house	10 00	667 15	638 56	346 14	159 60	1,821 45
" minister's office	38 65					38 65
" post office		516 43	505 85	553 33	60 50	1,636 11
" engineer's office	10 00					10 00
Valleyfield post office, &c		401 46	377 52	145 87	264 16	1,189 01
Victoriaville post office, &c	1 00	118 55	280 75	236 95	41 70	678 95
West Farnham post office		98 71	104 20	54 81	20 00	277 72
Totals for Quebec	14,695 86	56,576 97	23,045 86	36,811 26	6,932 19	138,062 14
Ontario.						
Alexandria post office, &c		404 47	223 38	379 65		1,007 50
Almonte post office, &c		445 44	222 75	127 43	81 25	876 87
Amherstburg post office, &c		382 06	181 00	212 10	35 00	810 16
Arnprior post office, &c		382 93	316 31	546 63	36 11	1,281 98
Barrie post office, &c		408 98	225 00	368 93	75 00	1,077 91
Belleville post office, &c		758 27	830 98	1,710 48	83 25	3,382 98
Berlin post office, &c		393 68	282 03	351 29	20 42	1,047 42
Bowmanville post office, &c		372 68	172 50	203 12		748 30
Brampton post office, &c		389 03	227 00	357 01	35 00	1,008 04
Brantford post office, &c		575 90	249 48	256 74	38 00	1,120 12
Bridgeburg post office, &c		297 27	202 25	61 85	4 00	565 37
Brockville post office, &c		460 38	409 39	649 46	170 00	1,689 23
Carleton Place post office, &c		281 00	202 50	186 33		669 83

PART II.—STATEMENT B.—EXPENDITURE—*Continued.*

Name of Building.	Rents.	Salaries of and Supplies for Engineers.	Heating.	Lighting.	Water.	Total.
Ontario—Continued.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Cayuga post office, &c		46 86	72 02	51 23		170 11
Chatham drill hall		350 00	41 86			391 86
" post office, &c		515 26	235 34	159 24	42 50	952 34
Clinton post office, &c		194 47	215 30	114 93	2 00	526 70
Cobourg post office, &c		394 36	290 50	663 93	45 50	1,394 29
Cornwall post office, &c		477 85	324 00	147 56	112 50	1,061 91
Deseronto post office, &c		408 03	303 75	257 97	39 00	1,008 75
Dundas post office	500 00	45 76	39 00	46 95		631 71
Fort William post office		425 01	485 00	503 15	73 42	1,486 58
" engineer's office	96 00					96 00
Galt post office		399 68	276 40	30 71	31 25	738 04
Gananoque custom house					23 82	23 82
" post office		0 75	252 91	1 60	23 23	278 49
Goderich post office, &c		392 03	256 31	292 37	60 00	1,000 71
Guelph post office, &c		470 19	593 17	1,656 55	63 44	2,783 35
Hamilton custom examining warehouse		568 92	6 75	170 38	43 85	789 90
" inland revenue office		132 90		33 06	7 50	172 56
" post office, &c		1,461 95	1,263 34	2,572 77	1,050 00	6,348 06
Hawkesbury post office, &c		381 15	237 16	73 92	16 50	708 73
Ingersoll post office, &c		412 28	300 69	625 16	48 61	1,386 74
Kingston custom house		200 95	280 15	191 33	60 80	733 23
" drill hall		550 00				550 00
" examining warehouse					12 95	12 95
" inland revenue office		52 33		77 25	24 26	153 84
" military college		3,142 50				3,142 50
" post office		582 08	461 20	669 15	60 60	1,773 03
Lindsay post office, &c		379 43	241 09	69 75	30 60	720 27
London custom house		1,068 30	860 96	671 48	122 58	2,723 32
" drill hall		660 00				660 00
" engineer's office	582 00					582 00
" post office		1,293 67	729 59	2,015 55	70 00	4,108 81
" military store			46 25			46 25
Napanee post office, &c		382 21	223 88	137 65	73 38	817 12
Niagara Falls post office, &c		395 46	238 00	244 35	6 25	884 06
Orangeville post office, &c		375 88	219 50		20 00	615 38
Orillia post office, &c		327 61	246 02	109 66	32 50	715 79
Oshawa post office, &c		399 57	205 50	127 20	14 74	747 01
Ottawa archives building		1,105 00	817 94	452 45		2,375 39
" astronomical observatory		1,224 00	835 85	291 03		2,350 88
" bacteriological laboratory			110 32	130 00		240 32
" experimental farm			1,731 82	296 45		2,028 27
" geological museum		850 00	1,108 84	851 00		2,809 84
" Major's Hill Park greenhouse		300 00	430 00			730 00
" national art gallery and fisheries museum			245 00	231 00		476 00
" post office		1,205 00	1,407 65	941 50		3,554 15
" parliamentary and departmental buildings		40,059 75	39,332 36	22,059 61		101,451 72
" printing bureau		13,560 44	6,956 09	2,200 59		22,717 12
" Royal mint			97 46			97 46
" Supreme court		910 00	743 13	358 50		2,011 63
" workshops (D.P.W.), &c		970 00	1,053 00	370 50		2,393 50
Ottawa rented buildings—						
Albert St. (Railway Mail Service offices)	720 00			11 00		731 00
Bank St. (Trafalgar building)	600 00					600 00
Cliff St. (branch observatory)				12 00		12 00
Metcalfe St. (Labour Dept., Militia D.O.C.)	2,381 60			157 44		2,539 04
Metcalfe St. (Surveyor General)	3,451 92	300 00	391 12	189 00		4,332 04
Queen St. (Exhibition Commission)	1,000 00		115 00	60 00		1,175 00
Queen St. (Imperial building)	5,736 20		4 86	231 00		5,972 06
Queen St. (Ry. Commission, &c.)	6,521 11	1,105 00	477 75	392 80		8,496 66

PART II.—STATEMENT B.—EXPENDITURE—*Continued.*

Name of Building.	Rents.	Salaries of and Supplies for Engineers	Heating.	Lighting.	Water.	Total.
Ontario—Continued.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ottawa rented buildings—*Con.*						
Queen St. (Dominion Analysts office)			165 99	70 50		236 49
Rideau St. (Corry building)	13,912 42			369 00		14,281 42
Slater St. (Canadian building)	27,330 04	605 00	3,344 88	1,430 69		32,710 61
Slater St. (Militia building)	33,929 39	1,815 00	3,659 04	2,133 56		41,536 99
Sparks St. (Ahearn & Soper G. B. Survey)	450 00					450 00
Sparks St. (Seybold building)	5,416 66			182 00		5,598 66
Sparks St. (Sparks Chambers)	803 00					803 00
Sparks St. (Egan building)	200 00			10 11		210 11
Sussex St. (French Translators offices)	600 00		140 94	174 22		915 16
Sussex St. (Geological Museum annex)	1,280 00					1,280 00
Sussex St. (Marine Stores)			181 00			181 00
Wellington St. (custom house)	1,495 57	905 00	331 83	193 00		2,925 40
Wellington St. (Langevin Block)	10 00					10 00
Wellington St. (Mounted Police stores)	2,248 59		100 00	63 00		2,411 59
Wellington St. (Thistle building)	1,100 00		14 15			1,114 15
Wellington St. (workshops of D. P. W., old)	450 00					450 00
Wellington St. (gas inspection office)				6 16		6 16
Various buildings—Rent of telegraph wire for electric clock service	412 50					412 50
Paris post office, &c		373 58	132 57	72 00	63 60	641 75
Pembroke post office, &c		375 08	304 74	148 50	40 00	868 32
Peterboro' custom house		279 50	269 88	155 50	50 00	754 68
" post office		376 44	321 11	233 10	75 00	1,005 65
Petrolea post office, &c		380 28	220 83	265 86	39 76	906 73
Picton post office		377 56	239 25	89 14	40 59	746 45
Port Arthur post office		390 95	509 50	226 42	43 41	1,170 28
" engineer's office	325 00			3 00		328 00
Port Burwell engineer's office	15 00					15 00
Port Colborne post office		302 90		116 55	20 00	439 45
" engineer's office	180 00					180 00
Port Hope post office, &c		377 33	325 95	497 00	15 88	1,216 16
Prescott custom house			124 00	34 88	35 00	193 88
" post office		423 83	221 20	156 20	85 00	886 23
Rat Portage post office		381 23	298 13	356 18	74 68	1,110 22
Sandwich post office		235 75	107 73	60 05		403 53
Sarnia post office, &c		473 32	330 35	441 68	44 00	1,289 35
Sault Ste. Marie post office, &c		624 11	1,108 84	275 80	55 68	2,064 43
Smith's Falls post office, &c		379 13	175 50	98 28	89 12	742 03
Stratford armoury		350 00				350 00
" post office, &c		627 49	397 04	501 66	80 00	1,606 19
Strathroy post office		399 18	198 73	183 25	19 79	800 95
St. Mary's post office			217 50			217 50
St. Catharines drill hall		350 00				350 00
" post office, &c	19 70	403 18	410 00	212 68	60 42	1,105 98
St. Thomas post office, &c		404 98	280 00	157 78	11 62	854 38
Toronto, Assistant Receiver General and Inland Revenue offices		943 50	323 65	139 63	30 05	1,436 83
" civil service exam. office	35 00					35 00
" custom house		3,662 54	775 55	1,053 89	148 54	5,640 52
" drill shed		1,369 65				1,369 65
" engineer's office	700 00					700 00
" examining warehouse		4,471 96	1,277 97	528 88	67 70	6,346 51
" pneumatic tubes	135 00					135 00
" post office	960 41	7,473 60	1,267 44	5,943 96	452 48	16,097 89
" post office, station G	382 50	98 15		89 56		570 21
" post office, station A, Union station		1,511 25		1,623 72		3,134 97
" post office, station H			11 56			11 56

PART II.—STATEMENT B.—EXPENDITURE—*Continued.*

Name of Building.	Rents.	Salaries of and Supplies for Engineers	Heating.	Lighting.	Water.	Total.
Ontario—Concluded.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Toronto post office, station B, 117 King.	1,000 00	140 95		406 63		1,547 58
" post office, station F		525 45	418 56	328 62	58 57	1,331 20
" post office, station C		469 75	221 00	589 49	14 07	1,285 31
" post office, station L, Central depot	420 00					420 00
" Junction post office		412 37	215 22	416 60	18 00	1,062 19
" steamboat inspector's office	720 00					720 00
Trenton post office		426 38	220 80	150 00	75 00	872 18
Walkerton post office, &c		372 13	287 13	151 10	46 50	856 86
Windsor drill hall		350 00				350 00
" post office, &c		859 36	501 80	1,390 39	96 00	2,847 55
Wingham post office		190 91	273 13	145 84	11 43	621 31
Woodstock armoury			1 50			1 50
" post office, &c		460 51	379 78	590 36	35 20	1,465 85
Totals for Ontario	116,119 61	119,316 90	88,854 17	68,819 16	4,786 21	397,896 05
Manitoba.						
Brandon experimental farm			377 29	50 33		427 62
" immigrant building			1,113 80	117 71	56 46	1,287 97
" post office, &c		612 05	833 06	849 22	100 00	2,394 33
Dauphin immigrant station			29 00	41 68		70 68
Elkhorn immigrant shed	90 00					90 00
Portage la Prairie post office, &c		629 28	547 99	315 25	21 54	1,514 06
Virden immigrant building			16 25			16 25
Winnipeg custom house	550 00	474 85	857 24	204 55	83 95	2,170 59
" Dominion lands office			247 70	12 65	39 05	299 40
" public buildings cus. w'house	50 00	29 20	36 35	3 65		119 20
" engineer's office	837 00					837 00
" examining warehouse			562 68	164 40	46 10	773 18
" immigrant building, I	309 65		3,764 14	1,231 86	1,124 25	5,429 90
" immigrant shed (C.P.R. stn.)		20 00				20 00
" post office	1,518 75	5,337 18	3,851 47	5,816 37	983 85	17,507 62
" N.W. commissioners	360 00					360 00
" weights and measures	600 00					600 00
" immigrant building, II			835 54	320 41	82 80	1,238 75
" immigrant buildings, III, IV			863 75	141 25		1,005 00
" immigrant building, V				6 90		6 90
Totals for Manitoba	4,315 40	7,102 56	13,936 26	9,276 23	2,538 00	37,168 45
Northwest Provinces.						
Alameda Dominion lands office	30 00		19 40			49 40
Battleford Dominion lands office	700 00		306 63			1,006 63
" immigration building	655 00		224 73			879 73
North Battleford immigration building			20 00			20 00
Calgary custom house, &c	3,000 00			126 00		3,126 00
" engineer's office	772 56			11 36		783 86
" immigrant building			244 83	60 57	30 00	335 40
" post office, &c	550 64	1,091 05	1,378 72	3,973 45	300 00	7,293 86
Doystend immigrant building	96 00					96 00
Davidson immigrant building			477 00			477 00
Edmonton Dom. lands and registry office	22 50	501 22	348 89	188 05		1,060 66
" immigrant shed	1,266 00		667 62	66 10	10 00	2,009 72
" post office and inland rev	3,782 50	755 52	441 79	935 75	70 82	5,986 38
Estevan Dominion lands office	440 00					440 00
Humbolt Dominion lands office	710 00		113 40			823 40
Indian Head experimental farm			684 50	131 75		816 25
Leduc immigrant building	70 00					70 00

PART II.—STATEMENT B.—EXPENDITURE—*Concluded.*

Name of Building.	Rents.	Salaries of and Supplies for Engineers	Heating.	Lighting.	Water.	Total.
Northwest Provinces—Continued.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Lacombe immigrant building	130 00		96 78			226 78
" experimental farm				35 69		35 69
Lloydminster immigrant building			97 69			97 69
Lethbridge court house and cust. house	5 84		39 50	138 70	39 00	223 04
" experimental farm	32 00		62 00	11 16		105 16
" immigration building			101 15	92 65	10 00	203 80
" post office		501 80	120 00			621 80
" Dom. lands office					13 00	13 00
Moosejaw post office, &c.	1,620 00	615 50	278 03	478 90	52 50	3,044 93
" immigration building			136 85			136 85
Macleod custom house			63 96	109 81	13 50	187 27
Prince Albert Dom. lands and reg. office		333 30				333 30
" immigrant shed			121 50	8 64		130 14
" post office		1,086 15	1,671 49	270 42	103 10	3,131 16
Red Deer court house		685 00	136 23			821 23
Regina clerk of works office	275 00	6 20				281 20
" Dom. lands and registry office		1,139 75	641 29	480 10	45 00	2,306 44
" inland revenue office	100 00					100 00
" immigrant building	1 00		351 75	39 45	29 75	421 95
" post office		624 15	600 78	578 50	35 00	1,838 43
Rosthern Dom. lands office	120 00		14 00			134 00
Strathcona immigrant shed	144 00		51 66			195 66
Saskatoon immigrant building			829 25			829 25
" post office	195 00					195 00
Sedgwick immigrant building	210 00		15 50			225 50
Yorkton Dominion lands office	588 25		190 10			778 35
" immigrant building			61 90			61 90
Vermilion immigrant building	336 00		8 50			344 50
Totals for N.W.T.	15,852 23	7,339 64	10,145 19	7,737 35	751 67	41,826 08
British Columbia.						
Atlin post office		139 50	104 50	28 35		272 35
Agassiz experimental farm			76 20			76 20
Colwood, telegraph repairs, &c.	30 00					30 00
Esquimalt custom house			16 00			16 00
Kamloops post office, &c.		603 90	440 50	465 92	36 00	1,546 32
Nanaimo post office, &c.		571 55	246 75	300 75	54 00	1,173 05
Nelson post office, &c.		618 93	551 67	788 73	72 00	2,031 33
New Westminster Fisheries and Indian department		329 60	147 36	6 65	67 80	551 41
New Westminster post office		727 10	423 52	709 98	60 27	1,920 87
Rossland post office, &c.		570 70	547 31	555 50	184 68	1,856 19
Vancouver examining warehouse, new building	2,097 00	6 00	43 19	410 89	11 48	2,568 56
" post office	438 00	2,208 60	789 07	2,434 56	73 37	5,943 60
" custom house	1,525 09		68 75	234 30		1,828 05
" shipping office	150 00					150 00
" isolation hospital			73 99			73 99
Victoria examining warehouse, p. building	100 20	2,849 45	861 20	1,298 97	42 90	5,152 72
" Marine and Indian office (old custom house)		687 50	88 50	108 45	16 85	901 30
" old post office			51 50	0 45	65 50	117 45
William's head quarantine station	30 00		3,712 80			3,742 80
Totals for B.C.	4,370 20	9,312 83	8,242 81	7,341 50	684 85	29,952 19
Yukon.						
Whitehorse post office, &c. (Yukon)		1,375 00	1,701 88			1,375 00

PART II, STATEMENT C.—Showing the amounts loaned by government under the authority of special Acts of parliament, and upon the security of debentures of the borrowing corporation. The works upon which these funds are expended are of a quasi-public nature, and the several advances have been made upon the recommendation of the Honourable the Minister of Public Works, and after inspection by the Chief Engineer.

To whom Loaned.	Parliamentary Authority	Purpose.	Amount.
			$ cts.
Harbour Commissioners of Quebec..	62-63 Vic., ch. 34, sec. 34.	Improvements to Princess Louise dock	158,311 21

PART III

REPORT

ON

PUBLIC BUILDINGS THROUGHOUT THE DOMINION

FOR THE FISCAL PERIOD ENDED MARCH 31, 1908.

BY THE

CHIEF ARCHITECT

PUBLIC WORKS, CANADA,
CHIEF ARCHITECT'S OFFICE,

NAPOLEON TESSIER, Esq., Secretary, OTTAWA, October 26, 1908.
Department of Public Works.

SIR,—I am sending you herewith, annual report of works executed under this branch during the fiscal period ended March 31, 1908.

D. EWART,
Chief Architect.

PROVINCE OF NOVA SCOTIA.

ANTIGONISH.

PUBLIC BUILDING.

This building, which was described in a previous report, is completed and supplied with a tower clock.

Plans, &c., prepared by this department.
Clerk of works, Alexander McGillivray.
Contractors, the Rhodes, Curry Company.

AMHERST.

PUBLIC BUILDING.

Two borrowed lights were made in rooms of attic; the back stairs from ground floor to attic had hardwood treads renewed; a hardwood floor was laid in caretaker's hall, parlour and dining-room; painting was done to outside woodwork of building, inside woodwork of first floor and attic, heating coils and floors of four rooms; the hardwood of all fixtures, window shutters, &c., are varnished, and repairs were made to woodwork, painting, glazing, locks, &c.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

BRIDGEWATER.

PUBLIC BUILDING.

A contract for the construction of this building was entered into on October 3, 1907. The building has a frontage of 62 feet on King street by a depth of 35 feet and has two stories of brick with stone dressings on a stone basement.

The partitions in basement and ground floor as well as the safe rooms, of which there is one on each floor, are brick; the basement walls are lined with brick; the

BRIDGEWATER—*Continued.*

basement floor is concrete, while the remaining floors and partitions as well as the stairway and roof are of wood. The external entrance steps are stone, and the external cornices of metal.

The basement is for heating apparatus, fuel and storage; the ground floor for post office and examining warehouse, and the first floor for the Customs, &c.

Plans, &c., prepared by this department.

Clerk of works, Robert H. Lamb.

Contractors, Falconer & McDonald.

CANSO.

PUBLIC BUILDING.

This building, which was described in a previous report, is completed.

GLACE BAY.

PUBLIC BUILDING.

This building, for the construction of which a contract was entered into on December 10, 1907, will consist of a main portion of 51 feet by 38 feet, to be two stories of brick with stone dressings and on a stone basement, and a one-story brick adjunct 33 feet by 30 feet, with stone dressings and on a stone basement.

The basement of the main portion is excavated and is designed for heating apparatus, fuel and stores, the ground floor for a post office, and the first floor for Customs and Inland Revenue offices. There are brick vaults, one on the ground floor and the other on the first floor. The adjunct is designed to accommodate the examining warehouse and weights and measures, and the basement is unexcavated.

Plans prepared by R. B. Whitten, architect.

Clerk of works, Dan. Ross.

Contractors, Rhodes, Curry & Co.

HALIFAX.

CUSTOM-HOUSE.

The building is completed, fitted up and furnished, and a tower clock is installed in tower. The Customs Department moved into the building on Monday, June 17, 1907.

Drawings and specifications prepared by this department and work supervised by C. E. W. Dodwell, resident engineer and superintendent of public buildings, Nova Scotia, Halifax, N.S.

W. J. Busche, resident architect.

Contractor for building, M. E. Keefe.

Contractor for heating apparatus, Longard Bros.

Contractor for tower clock, Schultz Bros.

DETENTION HOSPITAL.

The construction of this building, which was described in a previous report, is now nearly completed.

Plans, &c., prepared by this department.

Resident architect, A. G. Gates.

Contractors for construction of building, lighting, &c., S. A. Marshall & Son.

Contractors for heating apparatus, Martel & Langelier.

HALIFAX—*Continued.*

DOMINION BUILDING.

New post office trucks were supplied and repairs were effected to lighting, carpentry, locks, lock boxes, furniture, glazing and elevator.

Work supervised by C. E. W. Dodwell, resident engineer and inspector of public buildings, Halifax, N.S.

CUSTOMS APPRAISER'S OFFICE.

This is a rented building. Minor repairs were effected to plumbing, and goods hoist, under the supervision of C. E. W. Dodwell, resident engineer and superintendent of public buildings, Nova Scotia, Halifax, N.S.

IMMIGRATION BUILDING.

Two new hot water heating furnaces were installed similar to the new furnaces supplied last year, making four new furnaces connected into one battery; repairs were made to ranges, plumbing, carpentry, painting and wiring, and fire escapes were supplied and erected.

INVERNESS.

PUBLIC BUILDING.

This building, which was described in my report of last year, is now completed and fitted up with hot water heating apparatus.

Plans, &c., prepared by this department.

Clerk of works, Duncan A. McIsaac.

Contractor, Edward F. Munro.

LAWLOR'S ISLAND.

QUARANTINE STATION.

A combined well and filter was constructed; a lift pump was put in new hospital, and repairs and improvements made to the various buildings and wharf.

Plans and specification prepared and work supervised by C. E. W. Dodwell, resident engineer and superintendent of public buildings, Nova Scotia, Halifax, N.S.

NEW GLASGOW.

PUBLIC BUILDING.

A granolithic foot path, with curb and gutter, was laid along front and side of property. A lavatory room for post office was fitted up on ground floor. The cement floor of the basement was repaired.

Work was done under the supervision of D. H. Waterbury, of this department, St. John, N.B.

PICTOU.

CUSTOM-HOUSE.

Some furniture was supplied the Inland Revenue office; some internal painting was done and repairs were made to tower and roof.

Work supervised by D. H. Waterbury, of this department, St. John, N.B

PICTOU.—*Continued.*

POST OFFICE.

The woodwork was re-painted or re-varnished, the walls and ceilings cleaned and tinted, the basement lime-washed and the heating coils bronzed.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

SHELBURNE.

PUBLIC BUILDING.

A contract for the construction of this building was entered into on February 12, 1908. It is to measure on plan 39 feet by 54 feet, the walls built of stone with a wooden mansard; the main portion to be two stories, basement and mansard, and an angle tower three stories and basement in stone with a wooden lantern to reach 61 feet from level of ground exclusive of finial.

The basement partitions are to be brick and the basement floor concrete, but the remaining partitions and floors, as well as the stairs and roof, are to be of wood. The ground floor will contain post office, examining warehouse, stairway, hall and lavatory; the first floor, the Customs and Inland Revenue offices, and the attic the caretaker's apartments. In the basement are to be the heating apparatus, rain-water tank, fuel room and store-room.

Plans, &c., prepared and work to be supervised by L. Lessel, architect, Halifax, N.S.

Clerk of works, Fred. Miner.

Contractors, A. Hood and Wm. Brooks.

SPRINGHILL.

PUBLIC BUILDING.

The interior woodwork was re-painted or re-varnished; the walls and ceilings tinted, and the heating coils painted.

Work done under the supervision of D. H. Waterbury, of this department, St. John, N.B.

TRURO.

ARMOURY.

On August 9, 1907, a contract was entered into for the construction of this building, situated on the north side of Wilson street. This is a two-story brick building with stone dressings and on a stone basement, measuring 58 feet frontage by 33 feet depth

Only a portion of the basement, 12 feet in width by the depth of the building, is excavated, and contains the furnace room and fuel rooms. The ground floor contains two company armouries, one room for stores, a vestibule, a stairway hall and a closet-room; on the first floor are a lecture-room, a regimental C. O. room, two company C. O. rooms, an adjutant's room and a stairway hall. Excepting a number of those on first floor, the partitions are of brick; the floors, roof and stairs, excepting in basement and lavatory, where the floors are cement, are of wood.

Plans, &c., prepared by this department.

Clerk of works, D. Henderson.

Contractors, Frank Dexter & Co.

WESTVILLE.

PUBLIC BUILDING.

A contract for the construction of this building, in the vicinity of the Intercolonial Railway station, was entered into on September 14, 1907. It is to be a 61 ft. by 33 ft. 6 in. two stories brick building with stone dressings and on a stone basement; the outside steps are to be concrete; the basement and ground floor partitions, the safe-rooms and the lining of the basement walls to be brick; the first floor partitions, the stairway, the roof and the floors, excepting the basement floor, which is to be concrete, to be wood; the outside cornice to be metal, and the roof covering to be tar and gravel composition.

The basement is for the heating, fuel and stores; the ground floor is for post office, examining warehouse and stairway hall, and the first floor for the offices of the Customs and Inland Revenue. There are a bath-room and a w. c. room on the first floor, and a brick vault on each floor.

Plans, &c., prepared by this department.

Clerk of works, W. R. McKean.

Contractor, E. T. Munro.

PROVINCE OF NEW BRUNSWICK.

CAMPBELLTON.

PUBLIC BUILDING.

The boundary fence was taken down and replaced in a more advantageous position; new door locks, door springs and ladders were supplied and repairs made to mast and roof.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

FREDERICTON.

ARMOURY.

The caretaker's rooms and hall were tinted, painted and papered; the chimney of armoury was elongated; a new door was made from kitchen to dining room of quarters, and repairs were made to the plastering, roof covering and woodwork.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

PUBLIC BUILDING.

The works reported last year are completed and in addition the roof has been painted and sundry repairs done to woodwork.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

MARYSVILLE.

PUBLIC BUILDING.

Repairs were made to woodwark, painting and tinting; the roof was repaired, and a wire fence with gates put up inclosing the property.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

NEWCASTLE.

PUBLIC BUILDING.

A granolithic foot path was laid along front and side of property and a pipe drain for surface water along the side.

The offices and rooms had the walls and ceilings tinted and the woodwork painted or varnished. New hardwood steps were put in lobby. The venetian blinds were re-painted, re-taped and re-corded, and some minor repairs were made to joinery.

RICHIBUCTO.

PUBLIC BUILDING.

The sewer, which had become clogged, was overhauled and put in good order, and some brickwork done in basement.

Work supervised by D. H. Waterbury, of this department, St. John, N.B

ST. JOHN.

CUSTOM-HOUSE.

A number of the sandstone dentils of the front cornice, supposed to be injured when the building was partially destroyed by fire, which were found to be unsafe, were removed and replaced by copper. The stonework of front was pointed. The copper roof covering was repaired and the down pipes in part, at the rear, were renewed.

The Water street alleyways and walks were asphalted.

The outside window sashes at front and end of building were re-stained and varnished. The Collector of Customs offices were cleaned, painted, oiled and varnished.

A room was constructed by glazed wood partitions and doors in hall south wing to provide an additional office for the Marine Department.

Repairs were made to kitchen range, chutes, hydraulic hoist, furnaces, bells, clocks, painting, carpentry, plastering, locks, plumbing, door springs, furniture and fittings.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

ALTERATION OF AND ADDITION TO MILITARY STORE BUILDING.

This is an extension of 40 feet in length and 38 feet in breadth from the original building, which was 103 feet in length by 38 feet in breadth, making in all a building 143 feet in length by 38 feet in breadth.

It has two stories of stone on stone foundation walls, surmounted by a wooden mansard story.

The work and materials throughout the extension are similar in all respects to those in the original portion. In the mansard story of the old portion, 30 feet of the length is partitioned off and divided up for caretaker's apartments; all the space in the new part is devoted to storage.

Plans and specification prepared by this department.

Clerks of works, W. J. Fitzgerald.

Contractors, John Flood and Edward Bate.

IMMIGRATION BUILDINGS.

(Including No. 4 Shed.)

The galvanized smokestack, being worn and dangerous, was removed and replaced by a new one; the iron scuppers on roof were removed and replaced by copper scuppers; the entire exterior of the original building was painted and the roof

ST. JOHN—*Continued.*

repaired; an observation room was partitioned off on first floor; a new wooden foot path was laid along southern side; the halls and sleeping rooms were wainscotted; the upper flat and the hospital apartments had the walls and ceilings cleaned and tinted; repairs were made to plumbing, carpentry, painting, glazing, cooking ranges, furnaces, furniture, &c.; some floor cloth was supplied, and the sewer, in part, opened up and relaid.

Work supervised by D. H. Waterbury, of this department, St. John, N.B

SAVINGS BANK.

The coal cellar and ash bin roof, which was decayed and leaking, was rebuilt and asphalted, and the brick walls and partitions of the same were repaired. Repairs were made to furnace brickwork, plumbing and flag-mast.

Work supervised by D. H. Waterbury, of this department, St. John, N.B

DETENTION HOSPITAL.

The Martello Hotel, St. John West, was leased by the department for use as a detention building.

POST OFFICE.

A new lead-lined cistern was constructed in place of the original one, which was worn-out and useless.

The floor of boiler-room and of mail delivery in basement, which was sinking, had to be excavated, the excavated portion filled with stone, and a concrete floor laid in boiler-room and hoist-room. The mail delivery floor was asphalted; the street letter boxes in city and Carleton were painted; the registration office counter, partition, &c., were extended; an electric stamping machine was supplied and set up; additional window blinds were hung in carriers' room and repairs were made to fittings, furniture, plumbing, heating, carpentry, elevator, roof covering, glazing, painting, furniture, lighting, hardware, &c.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

PARTRIDGE ISLAND QUARANTINE STATION.

The buildings hereat comprise a disinfection house, four detention buildings, two hospitals, a gas-house and plant, a quarantine steward's house and a medical superintendent's residence.

The detention buildings at southern shore had iron straining rods, three in each, trussed through them as they are exposed to heavy gales; in the new hospital a doorway was cut through stone wall of basement and fitted with frame, door, porch and steps; building 'C' had ground floor partitioned off into sleeping rooms ceiled with wire mesh, partitions painted, doors re-hung and beds re-set; the steward's house was provided with water service, drainage to shore, sinks, &c.; the medical superintendent's house had stationary wash tubs, new plumbing, painting, papering, tinting, glazing, linoleum, new door to basement and repairs to carpentry, masonry, &c.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

ST. STEPHEN.

PUBLIC BUILDING.

The brickwork was repaired and pointed, and some additions made to heating, under the supervision of D. H. Waterbury, of this department, St. John, N.B.

SUSSEX.

PUBLIC BUILDING.

Additions were made to the heating apparatus; some of the post office fittings were improved, and additions made to the electric lighting.

Work done under the supervision of D. H. Waterbury, of this department, St. John, N.B.

TRACADIE.

LAZARETTO—LAUNDRY AND SEPTIC TANK.

These works, which were described in my report of last year, are practically completed, ready for the placing of the disinfecting and washing machinery.

Plans, &c., prepared by this department.

Clerk of works, Charles LeBreton.

Contractor, Thos. P. Charleson.

LAZARETTO—MAIN BUILDING.

Repairs were made to the roof, and some flooring laid in basement.

Work done under the supervision of D. H. Waterbury, of this department, St. John, N.B.

WOODSTOCK.

PUBLIC BUILDING.

The exterior of the building has been completely overhauled, the masonry and brickwork painted, &c., the woodwork, ironwork, &c., painted, and the roof of extension repaired. The interior of the building has had the walls cleaned and ceilings tinted or painted, the plastering and joinery repaired, the joinery painted or varnished, the fittings varnished, the heating coils bronzed, and some new plumbing put in.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

PROVINCE OF PRINCE EDWARD ISLAND.

SUMMERSIDE.

PUBLIC BUILDING.

The fences, gates and the eaves of the building, which had been destroyed by fire from an adjoining property, were renewed, painted and made good. The exterior of the latrine shed in yard was painted, as was the outside joinery and ironwork and a large part of the interior joinery. The hardwood of screen and fittings of ground floor and first floor were rubbed down and varnished.

The annex roof, the plastering and joinery received minor repairs.

Work supervised by D. H. Waterbury, of this department, St. John, N.B.

PROVINCE OF QUEBEC.

CHICOUTIMI.

PUBLIC BUILDING.

This building, which was described in my report of last year, is practically completed.

Plans and specification prepared by this department.

Clerk of works, Wm. Warren.

Contractor, Adolphe Beaulieu.

Contractor for hot water heating, Ovide Guay.

COATICOOK.

PUBLIC BUILDING.

A fire escape was provided and some minor alterations made to the heating system.

All supervised by G. S. Gingras, of this department, Montreal, P.Q.

DRUMMONDVILLE.

PUBLIC BUILDING.

A granolithic sidewalk, with approaches to the main and mail entrances and to the letter receiver, was laid the full length of the property; the flag-pole was renewed, and all the exterior woodwork of the building, together with the fences about the property, were painted. All under the supervision of G. S. Gingras, of this department, Montreal, P.Q.

GROSSE ILE.

QUARANTINE STATION.

Disinfection building.—This building is not yet completed. The Dehaître disinfecting and washing apparatus is received for installation.

A building for inspection, with two stories of wood and lighted by electricity, was built.

The guards' building was completed and wired for electric lighting.

Medical superintendent's residence.—The verandahs and stairs were repaired and painted; the stable was repaired and re-floored, and a new flag-staff was erected.

Presbytery.—The exterior was painted and the interior was painted and papered.

Quarters for carter.—A wooden building on a stone basement, plastered inside and roofed with galvanized iron, was constructed.

Boatmen's quarters.—A new well was sunk; two of the dwellings were replastered and the remainder had plaster repaired.

Buildings for friends of the sick.—Two chimneys and a partition were built.

Brick hospital.—Two fire escapes were affixed and doors opened through walls thereto; three large rooms were divided by partitions, involving the putting in of 16 new doors, and steps were built at the end of verandah.

Small-pox shed.—The floors, walls and ceilings of large room were sheeted with pine boards and painted.

All the foregoing done under the supervision of Ph. Beland, clerk of works, Quebec, P.Q.

IBERVILLE.

POST OFFICE.

This building, which was described in my report of last year, is completed, fitted up and supplied with a hot water heating system.

Plans, &c., prepared by this department.

Clerk of works, J. E. A. Benoit, architect.

Contractor for construction of building and for heating system, A. G. Marshall.

Contractor for post office fittings, D. H. Langlois & Co.

LAPRAIRIE.

PUBLIC BUILDING.

A fire escape was erected on the west side of the building, under the supervision of G. S. Gingras, of this department, Montreal, P.Q.

LACHUTE.

PUBLIC BUILDING.

This building, a contract for the construction of which was entered into November 22, 1907, is to be a two-story brick building having stone dressings and stone entrance steps and on a stone basement story.

The roof cornice is to be of wood covered with metal, and the floors, partitions, stairs and roof are of wood, excepting that the basement floor is of concrete, and the basement partitions and piers are of brick. The building has a frontage of 44 feet on Main street, and a like depth on Bethany road.

The basement is to be divided into furnace-room, fuel-room and store-room; the ground floor is to be the post office, and on the upper floor are to be the Customs offices, w. c. rooms, &c. There is to be a brick vault on both ground and first floors.

Plans and specification prepared by this department.

Clerk of works, James McKimmie.

Contractor, O. B. Lafleur & Sons, Limited.

LACHINE.

POST OFFICE.

The caretaker's quarters were wired for electric lighting and the ground floor wiring was completely renewed. A heating stove was supplied the post office. Done under the supervision of G. S. Gingras, of this department, Montreal, P.Q.

LEVIS.

PUBLIC BUILDING.

This building, which was described in my report of last year, is completed.

Clerk of works, L. Auger.

Contractor, Joseph Couture.

LONGUEUIL.

PUBLIC BUILDING.

A one-dial non-striking tower clock was installed in the pediment, under the supervision of G. S. Gingras, of this department, Montreal, P.Q.

MAGOG.

PUBLIC BUILDING.

Tenders are about to be invited for the construction of this building, which is to be a two-stories brick building with stone dressings, on a concrete stone-faced basement, measuring on plan 60 feet by 34 feet.

The external steps are to be stone and the platform for examining warehouse in rear is to be of concrete. The partitions in basement and ground floor, the safe-rooms on ground floor and first floor and the linings of basement walls are to be of brick. The basement floor is to be concrete, but the remaining floors and partitions, as well as the stairways and roof are to be wood. The roof is to be covered with tar and gravel composition, and the external cornice with metal, but the frieze and coping are of cut stone.

The basement is for the heating apparatus, fuel and stores; the ground floor for the post office and examining warehouse, and the first floor for the Customs, bath-room, w. c. room, &c.

Plans, &c., prepared by this department.

MONTMAGNY.

PUBLIC BUILDING.

This building, which was described in a previous report, is completed.

Plans and specification prepared by this department.

Clerk of works, Theodore T. Beaumont.

Contractor, Napoleon Dumont.

Contractors for heating apparatus, Proulx & Mathurin.

Contractor for electric lighting, Charles Vezina.

MONTREAL.

EXAMINING WAREHOUSE.

At 5 p.m., on 31st day of October, 1907, a fire broke out in this building, which was brought under control at midnight of the same day after having done considerable damage to the roof and upper stories. The posts and beams supporting the roof, the windows of top story, the roof and the floor of top story were renewed. Repairs were made to elevator doors, floors, windows, partitions, fittings, plumbing, painting, glazing and ceilings; new belting and steel cables were put in; a new ladies' toilet-room was constructed and fitted up; the electric light system was renewed, a new telephone system was installed, the elevators were re-wired, all the interior woodwork and ironwork was re-painted.

Work supervised by C. Desjardins, of this department, Montreal, P.Q.

CUSTOM-HOUSE.

Two of the lavatories were renovated; the skylights were re-painted and in part re-glazed, and repairs were effected to roof, tile floors, plumbing and heating.

Work supervised by C. Desjardins, clerk of works, Montreal, P.Q.

CUSTOMS CANAL OFFICE.

The exterior and interior were re-painted; the roof, hardwood floor, plastering and stairs were renewed, and a sign supplied. All under the supervision of C. Desjardins, clerk of works, Montreal, P.Q.

MONTREAL—*Continued.*

INLAND REVENUE BUILDING.

The gas service was added to, altered and repaired; several chimney mantels were supplied and set; two new lavatory basins were fitted up; alterations in heating coils were made; two brass signs were provided and fixed; two new w. c.'s were fitted up in place of others; the roof was repaired and some new eaves gutters supplied; the inside walls were repaired and tinted, and there were a number of articles of furniture and some linoleum supplied.

Work supervised by C. Desjardins, clerk of works, Montreal, P.Q.

POST OFFICE ADDITION.

On October 12, 1907, a contract was entered into for the construction of this addition, which extends from the post office building along St. Francois Xavier street to Craig street, a distance of 93 feet. On the ground and first floors the continuity is destroyed by the intervention of Fortification Lane, but on the upper stories the various floors will be continuous from St. James street to Craig street.

The lines of the building, the building stone and the style of the detail employed are similar to those in the original building, but an increase in the size of window openings and some other necessary improvements have been made. There will be six stories above the Craig street pavement. All the materials are, so far as possible, non-combustible.

Plans and specification prepared by this department.

Resident architect, M. Perreault.

Contractors, Peter Lyall & Sons.

ST. HENRI POSTAL STATION.

Two sections of heating furnace were renewed; a new lavatory basin and a new w. c. basin were fitted up; some new gas lights were added, and repairs were made to roof, heating system and plumbing. All under the supervision of C. Desjardins, clerk of works. Montreal, P.Q.

POST OFFICE, ST. LOUIS DU MILE END.

A fire escape was put up; a new fence was erected on south boundary of property; a double door was hung at caretaker's private entrance; a new coil was placed in letter carriers' entrance, and a w. c. bowl replaced; the electric lighting was improved and a few lights added; a system of gas lighting was installed for the post office, and a few urgent repairs made to plumbing, w. c.'s, urinals, &c.

Work done under supervision of C. Desjardins, clerk of works, Montreal, P.Q.

POSTAL STATION 'C.'

The glazed partitions, pigeon-hole cases, tables, letter boxes, brass work and all other fittings were renovated and iron grilles fixed to doors and windows, including basement , for protection. A porch was constructed at entrance door, two lavatory basins and some new gas burners were installed and repairs made to plumbing and lighting. All under the supervision of C. Desjardins, clerk of works, Montreal, P.Q.

POSTAL STATION, WELLINGTON STREET.

A heating system was installed, a lavatory and w. c. fitted up, and some furniture supplied for the letter carriers.

NICOLET.

PUBLIC BUILDING.

This building, which was described in a previous report, is completed.
Plans, specifications, &c., prepared by this department.
Clerk of works, Philemon Rivard.
Contractor, Joseph Bourque.
Contractor for heating apparatus, Jos. Morrisette.

NOMININGUE.

IMMIGRATION BUILDING.

A picket fence, with the necessary gates, was erected along three sides of the property, and some heating stoves were supplied.

Work supervised by G. S. Gingras, of this department, Montreal, P.Q.

QUEBEC.

CUSTOM-HOUSE.

A room was provided for archives ; a number of the offices were papered and painted; a large lead-lined tank, carpets and a number of articles of furniture were supplied, and repairs were made to heating apparatus and plumbing.

Work supervised by Ph. Beland, clerk of works, Quebec, P.Q.

CULLER'S AND GAS INSPECTION OFFICES.

The offices were cleaned, painted and papered; a bath and a lavatory basin were put in gas inspection office, and some linoleum was supplied. All under the supervision of Ph. Beland, clerk of works, Quebec, P.Q.

EXAMINING WAREHOUSE.

The sugar samples room was enlarged; large tables were supplied for examining room; a part was partitioned off to contain wines and liquors and some additional gasoliers were supplied.

Work supervised by Ph. Beland, clerk of works, Quebec, P.Q.

HIS EXCELLENCY'S RESIDENCE, CITADEL.

Repairs to roof, heating furnace, water service, ventilation and bells were effected; some of the furniture was repaired and re-varnished, and the interior of the building was cleaned and put in order for the annual visit of Their Excellencies.

A wooden one-story building, 85 feet by 18 feet, for servants' quarters, was constructed along and outside the south wall of H. E. quarters, the lean-to roof reaching up to the basement window sills; abuting this is a three-stories wooden lavatories building connected with basement, ground floor and first floor of the quarters, and measuring on plan 17 feet by 18 feet.

Work supervised by Ph. Beland, clerk of works, Quebec, P.Q.

QUEBEC—*Continued.*

IMMIGRATION BUILDING, LOUISE EMBANKMENT.

Additions were made to the buildings; the roofs were re-covered with galvanized iron; a tank heater was set up and connected in kitchen; large incinerators for burning rubbish were put in; additions were made to plumbing and wiring, and general repairs effected to the various portions of the building, fences, &c.

Work supervised by Ph. Beland, clerk of works, Quebec, P.Q.

POST OFFICE.

An office was provided and fitted up for the resident engineer of this department; a room was fitted up for the archives; the street letter and parcel boxes were painted; the letter boxes in screen were removed and replaced by larger ones; a number of offices were re-papered and re-painted; repairs were made to plumbing, and some articles of furniture and some carpet, linoleum, curtains, &c., were supplied.

Work supervised by Ph. Beland, clerk of works, Quebec, P.Q.

QUEEN'S WHARF BUILDING.

A large wooden shed for the Marine and Fisheries Department was constructed, under the supervision of Ph. Beland, clerk of works, Quebec, P.Q.

DETENTION HOSPITAL, SAVARD PARK.

A wooden ice-house was constructed; benches and tables were provided and repairs made to electric lighting and electric bells, all under the supervision of Ph. Beland, clerk of works, Quebec, P.Q.

WEIGHTS AND MEASURES OFFICES.

General repairs to carpentry were effected, electric wires and a number of articles of furniture were supplied, under the supervision of Ph. Beland, of this department, Quebec, P.Q.

RICHMOND.

PUBLIC BUILDING.

The external surface of the outside walls was repaired and pointed; the gutters and down pipes were repaired and renewed; the electric wiring of ground and basement was completely renewed, and a granolithic sidewalk was laid from the building to the street line on the front and east side.

ST. HYACINTHE.

PUBLIC BUILDING.

A fire escape was erected on the west side; the plaster ceilings in the caretaker's quarters were renewed; a bath and basin was fitted up and the caretaker's quarters had the plaster tinted and the woodwork painted throughout.

ST. JEROME.

PUBLIC BUILDING.

The electric light installation was completely renewed; alterations to admit of placing new boxes and drawers were effected; the main office and the public lobby were cleaned and painted; blinds for all windows were supplied, and repairs were made to brickwork of main entrance and to flag-pole.

Work supervised by G. S. Gingras, of this department, Montreal, P.Q.

ST. JOHNS.

POST OFFICE BUILDING.

This building, which was described in my report of last year, is still in progress.

Plans and specification prepared and work supervised by J. E. A. Benoit, architect, St. Johns, P.Q.

Contractor, J. J. Collins.

CUSTOM-HOUSE.

Some office furniture was supplied. The counter in the long-room was altered and a screen erected thereon.

Work supervised by G. S. Gingras, of this department, Montreal, P.Q.

CAVALRY STABLES.

A contract for the construction of this building was entered into on August 12, 1907. It consists of a middle building 64 feet front, of two stories, and has four stables attached thereto each 72 feet in length by 32 feet 10 in breadth, with a litter shed 33 feet 10 inches by 9 feet attached. Two of these stables are in line with the front, giving, with the two-story portion, a frontage of 222 feet. The remaining stables, two in number, are arranged in the rear, radiating 60 degrees from each other and from those in front.

Each stable contains 215 standing stalls, a box stall and a feed room, besides having a litter-room attached, and each stall has iron feed boxes, manger, water trough, &c.

The building is of wood, shingled externally and resting on concrete foundation walls and piers. All the floors, excepting the loft of two-story portion, as well as the gangways, are concrete, and the chimneys brick.

Plans and specification prepared by this department.

Clerk of works, Evariste Lanier.

Contractor, Alexandre Saurette.

SHERBROOKE.

DRILL HALL.

On November 7, 1907, a contract was entered into for the construction of this building at a corner formed by the intersection of Belvedère and Victoria streets, fronting on the former.

It is a brick building having stone lintels, string courses, copings, &c., resting on a stone basement and having a frontage of 157 feet on Belvedère avenue by a depth of 208 feet. There is a main hall 80 feet by 180 feet, inside measurements, occupying the middle of the building, reaching to the rear and having, on front and both sides, lean-tos which are one-story on the flanks of the main hall, but two stories on the Belvedère street front, excepting the median 58 feet of frontage, which is three

SHERBROOKE—*Continued.*

stories in height. There is a basement under a part of the frontage and under a part of the lean-to on right flank, but the remainder is unexcavated.

The basement is arranged as bowling and shooting alleys, furnace and fuel-rooms, band-room and w. c. room; on the ground floor the front portion has the street entrance, battery Q. M. stores, 1 infantry Q. M. stores, A. S. C. wagon shed, field hospital wagon shed, battery stores, infantry adjutant, battery C. O., field hospital C. O., cavalry C. O., A. S. C. O., and stairways; to the left of the main hall are the battery harness and the gun shed, and to the right of the main hall A. S. C. harness, 1 cavalry armoury and 8 infantry armouries. On the first floor are lecture room, 2 sergeants' mess-rooms, band-room, officers' ante-room, officers' mess-room and store-room, the second floor containing five rooms besides a w.c. room, all for caretaker's apartment.

The partitions are brick and the stairs, floors and roof are wood excepting that the roof of the main hall has a steel frame and that the floors of main hall, grand entrance gun shed, wagon sheds and basement are of concrete.

Plans, &c., prepared by this department.

Resident superintendent, J. W. Grégoire, architect.

Contractors, Joseph W. Simoneau and Af. N. Dion.

PUBLIC BUILDING.

The basement was paved in concrete; the roof gutters were renewed; the frontal external stone steps were pointed; all the external wood and metal work was painted two coats, and the heating furnace of the examining warehouse was repaired.

Work supervised by G. S. Gingras, of this department, Montreal, P.Q.

SOREL.

PUBLIC BUILDING.

The platform and steps to warehouse entrance were renewed and those to the Inland Revenue office partly so; the floor of the balconies and the roof of the annex were covered with galvanized iron, and the roofs, the gutters and the down pipes repaired.

Work supervised by G. S. Gingras, of this department, Montreal, P.Q.

THETFORD MINES.

PUBLIC BUILDING.

The coal cellar was paved in concrete and some minor repairs effected, under the supervision of G. S. Gingras, of this department, Montreal, P.Q.

THREE RIVERS.

DRILL SHED.

This building, which was described in a previous report, is completed.

Plans, &c., prepared by this department.

Clerk of works, Emile Tanguay, architect.

Contractors for the erection of the building, Jos. Bourque & Co.

Contractors for heating apparatus, Martel & Langelier.

Contractors for electric lighting service, the Slade Electric Company.

PROVINCE OF ONTARIO.

AMHERSTBURG.

PUBLIC BUILDING.

Some minor repairs were effected to the roof, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

BARRIE.

PUBLIC BUILDING.

The building was provided with fire-escapes, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

BELLEVILLE.

DRILL HALL, ETC.

On May 17, 1907, a contract was entered into for the construction of this building. It consists of a main hall measuring 175 feet by 80 feet inside, with a range of armouries, &c., along the north side, 213 feet in length, with an average breadth of 32 feet. This range is two stories and basement, excepting the middle 56 feet of its length, which is three stories and basement, and contains the main entrance to the drill hall.

The basement of this range contains shooting galleries, bowling alleys, furnace-rooms and fuel-rooms; the ground floor, eight armouries, one Q. M. store, one C. O. room, one orderly-room, one mob. stores, one spare-room, the grand entrance to the main hall, one stairway hall, one w.c. room and two circular iron stairways; the first floor: one officers' mess-room, one sergeants' mess-room, two lecture-rooms, one band-room, one ante-room, two combined lavatory and w.c. rooms, two staircase halls and two iron circular stairs, while on the second floor are the caretaker's apartments. The walls are of brick on stone basement walls and stone foundations, and have stone string courses, copings, battlements and dressings. The floor of the main hall and of the basement are of concrete; the remaining floors and the roof are of wood, excepting the main hall, of which the roof framing is iron.

Plans and specification prepared by this department.

Clerk of works, Ira Thomson.

Contractor, Wm. Stuart.

BERLIN.

PUBLIC BUILDING.

The post office box screen was re-arranged, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

BRIDGEBURG.

PUBLIC BUILDING.

The building was provided with a fire-escape, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

BRAMPTON.

PUBLIC BUILDING.

A fire escape was fitted to the building and the Customs offices and caretaker's quarters were re-wired.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

BRANTFORD.

PUBLIC BUILDING.

A new system of plumbing was fitted up, a number of maple floors laid and the interior of the building cleaned, tinted and painted. New stone steps were constructed at Customs entrance.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

CHATHAM.

PUBLIC BUILDING.

The building has been wired for electric light.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

FORT WILLIAM.

PUBLIC BUILDING.

Alterations of the internal fittings were made, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

Contractors, Hamilton & Fergeau.

GALT.

PUBLIC BUILDING.

New heating furnaces and new plumbing were put in to replace the original in each case; the post office fittings were altered and added to; storm sashes and alterations of storm sashes were supplied, as also additional lighting, blinds and awnings for Custom-house, &c.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

GODERICH.

PUBLIC BUILDING.

A fire escape was erected, the heating apparatus overhauled and some repairs made to plumbing, all under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

GUELPH.

ARMOURY.

This building, which was described in a previous report, is yet under construction. Hot water heating and electric lighting service are being fitted up.

Plans, &c., prepared by this department.

Clerk of works, W. A. Mahoney.

Contractors, Nagle & Mills.

GUELPH—*Continued.*

PUBLIC BUILDING.

A fire-escape and brick ash pit were erected and some linoleum supplied. All under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

HAMILTON.

NEW DRILL SHED.

This building, which was described in a previous report, is still in progress. Plans and specifications for heating and lighting are prepared.

Plan, &c., prepared and work supervised by W. W. Stewart, architect.

Contractor, George F. Webb.

POST OFFICE.

The alterations recorded in my report of last year are completed; the Customs parcel post office has been fitted with a hand-power elevator ; new toilet rooms were fitted up for the Customs Department; new maple floor was laid in post office; additions and improvements were effected to lighting, heating and plumbing; an elevator was fitted up in warehouse; extensive painting, papering, tinting and cleaning were done, and an additional fire escape was provided.

INGERSOLL.

PUBLIC BUILDING.

The interior walls and ceilings were cleaned and tinted, the interior woodwork painted and the post office was piped for a gas supply; all under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

KINCARDINE.

PUBLIC BUILDING.

On November 27, 1907, a contract was entered into for the construction of this building on a plot of ground having a frontage of 100 feet on Queen street by a depth of 60 feet along Durham Market street.

The building is to be brick with stone dressings, on a concrete stone-faced basement and will consist of a 2½ stories and basement main portion, measuring 50 feet by 40 feet and a 1½ story adjunct measuring 25 feet by 16 feet.

The main portion has a basement for heating apparatus, fuel and stores ; a ground floor for the post office; a first floor for the Customs and Inland Revenue, and an attic for caretaker's apartments. The ground floor of the adjunct is for the examining warehouse.

Drainage is into a septic tank in rear.

Plans, &c., prepared by this department.

Clerk of works, Angus Kerr.

Contractor, Wm. Nicholson.

KINGSTON.

ROYAL MILITARY COLLEGE.

Servants' New Quarters.

On January 15, 1908, a contract was entered into for the construction of two buildings, each 167 feet long by 33 feet broad, placed on two opposite sides of a square, facing outwards, with yards in rear; each series separated by a lane which bisects the square.

Each block consists of eight dwellings of two stories in brick with stone dressings and on a stone basement.

The division walls, the partitions in basement, the lining of basement walls and the chimneys are of brick; the partitions, floors and stairs of first and second stories and the roof are of wood; the floor of basement and verandahs in rear are of concrete, and the front entrance steps are of stone.

Each dwelling has, in basement, a cellar, a laundry and a store-room: on the ground floor a living room, a kitchen, an entrance hall, a vestibule, a stairway hall and a verandah, and, on the first floor, two bed-rooms and bath-room. In the middle of the block are the furnace and fuel-rooms in the basement; two closets on the ground floor, and one closet and a stairway to roof on the first floor. The first floor has a passage, midway of the breadth, which runs from end to end and is so arranged as to allow the number of bedrooms in the several dwellings to be varied to suit requirements.

Plans, &c., prepared by this department.

Clerk of works, H. B. Smith, architect.

Contractor, M. Sullivan.

ARTILLERY PARK BARRACKS.

Men's Quarters—Alterations and Additions.

This building is being fitted up with a hot-water heating apparatus, plumbing, &c., together with new stairways, stone porch, metal roof covering, gutters and down pipes, stone chimney shaft, fireplaces, &c. A basement was excavated under 40 feet of the middle of the building, and the walls carried down the required depth, forming a furnace room, fuel room and store room, and ducts for the heating pipes were formed in concrete along the outer walls.

A wooden shed, to store the kitchen coal, was built at one end of the building, constructed of wood on a concrete foundatin. Some brick partitions were built in basement and various doorways were built up and some broken out and new jambs built in brick.

Plans, &c., prepared by this department and work supervised by H. B. Smith, architect, Kingston, Ont.

CUSTOM-HOUSE.

A new water closet was fitted up in basement in place of one broken, and a new electric light switch was installed.

Repairs were made to lawn pipes, water pipes, glazing, heating apparatus, &c.

All under the supervision of Arthur Ellis, architect, Kingston, Ont.

POST OFFICE.

The original letter-sorting racks and bunks were taken out and replaced by new; a letter-stamping machine was fitted up; the flooring of vestibule of clerk's room was renewed; a plankwalk was laid from Wellington street entrance to clerks' entrance; a new mail sleigh was provided; the street boxes for letters and parcels were painted, and repairs were made to yard gates, furnace doors, water and heating pipes, carpentry, locks, glazing, lighting, &c.

All done under the supervision of Arthur Ellis, architect, Kingston, Ont

LINDSAY.

PUBLIC BUILDING.

The internal walls and the ceilings of the caretaker's quarters were cleaned, tinted and papered; repairs and additions were made to plumbing; a fire escape was fixed to the building; the brickwork and masonry were painted, and additions were made to the general delivery.

Plans and specifications prepared by this department, and work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

LONDON.

MILITARY STORE BUILDING.

A freight elevator was installed; the building was fitted up for use as a military store building, and the residence painted and tinted.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

CUSTOM-HOUSE.

Additions were made to plumbing in caretaker's quarters and the stenographer's office of the Inland Revenue Department was fitted up and furnished.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

MARKHAM.

PUBLIC BUILDING.

On May 20, 1908, a contract was entered into for the construction of this building on a plot of ground having a frontage of 52 feet 6 inches on Main street by a depth of 100 feet on Joseph street.

It is to be a one-story brick building on a stone-faced concrete basement and surmounted by a wooden mansard attic. It will have a frontage of 38 feet on Main street by a depth of 34 feet.

The partitions, stairs, roof and floors, excepting the floor of basement, which is to be laid in concrete, and the basement partitions, which are to be brick, are to be of wood, and the roof and cornice covering to be of sheet metal. The entrance steps, excepting to mail entrance, which are to be concrete, are to be stone. The drainage is to be to a cesspool in yard.

The basement is to contain heating apparatus, fuel, w.c. and lavatory; the ground floor, the post office, and the attic left unfinished under the present contract.

Plans, &c., prepared by this department.

Clerk of works, David Mayer.

Contractor, W. J. Tuck.

NAPANEE.

PUBLIC BUILDING.

The masonry was stopped and re-pointed; linoleum was laid in postmaster's room, and two Corbin door springs supplied.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

NIAGARA FALLS.

PUBLIC BUILDING.

Additions were made to the post office screen; maple floors were laid, and desks, furniture and linoleum supplied the custom-house; the caretaker's quarters were cleaned, tinted and papered, and repairs were made to plumbing and lighting.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

NORTH BAY.

PUBLIC BUILDING.

This building, which was described in my report of last year, is approaching completion, and is fitted with a hot water heating apparatus.

Plans, &c., prepared by this department.

Clerk of works, W. A. Martin.

Contractors, McGillivray & Labelle.

ORANGEVILLE.

PUBLIC BUILDING.

A fire escape was fixed to the building; some alterations of the post office fittings were effected, and a new window was put in.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

ORILLIA.

PUBLIC BUILDING.

A cesspool was built on the government property; a fire-escape was fixed to building; alterations of porches were made, and some cleaning, tinting and painting done.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

OSHAWA.

PUBLIC BUILDING.

A fire escape was fixed to the building; a new steel safe and some window shades were supplied, and repairs were made to drain and foot paths.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

OTTAWA.

CANADIAN BUILDING, SLATER STREET.

Five rooms were cleaned and tinted; twelve doors were lettered; five floors were finished in hard oil and the furniture varnished; thirty-four lights were glazed; one ten-station and one six-station Deveau telephone system were installed, and there were supplied and fitted up 82 drop lights, nine meridian lamps, 39 prism shades, one five-light fixture, seven annunciators, 10 call bells, 15 desk lamps, two wash basins and one blower fan.

OTTAWA—*Continued.*

CITY POST OFFICE.

A fireproof room on cement piers, &c., was constructed in attic to contain electric clock; the mail entrance was enlarged; a coal bin was constructed in the basement under the side porch; the floors in working offices were twice oiled with dustless oil; 40 pigeon-hole cases and two trucks were re-lettered; the new hardwood was oiled and varnished; the coils in public lobby were re-bronzed; 69 lights were re-glazed, and all the newspaper and letter boxes throughout the city were painted and re-lettered. There were provided a new door, a partition, a telephone box, 120 hooks on cleats, six drawer cases, two pairs of stands with shelving, 14 window deflectors, six brass rods and curtains, two screens, nine step-ladders, 10 tables, 13 chair cushions, 121 feet of pigeon-hole shelving, one map rack, one five-light fixture, 75 meridian lamps, one heater, one 16-station Deveau 'phone system, 11 four-light fixtures, two electric fans, three three-light fixtures, two Nerst lamps, 46 drop lights, one desk lamp, 13 bracket lamps; also call bells and buzzers.

Repairs were made to 20 desks, 36 chairs, six screens, one cupboard, windows, locks, &c.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

COELOSTAT HOUSE AT ROYAL ASTRONOMICAL OBSERVATORY.

A contract for the construction of this building was entered into on October 23, 1907. It is attached to the observatory building, from which it extends outwards 89 feet, and is of varying breadths. For the first 8 feet 8 inches of its length it is 13 feet 6 inches in breadth; for the next 50 feet it is 7 feet 10 inches in breadth, after which it is 13 feet 6 inches for 17 feet 6 inches of its length, and for the remainder of its length is 7 feet 10 inches in breadth.

The foundation of walls and of piers for instruments and tracks are of concrete, and the superstructure is wood with wooden louvres and sheet metal roof covering.

Plans and specification prepared and work supervised by this department.

Contractors, J. O'Leary and W. J. Whelan.

BUILDING FOR STANDARDIZING STEEL TAPES.

A one-story building 183 feet 5 inches by 23 feet 5 inches, of concrete and wood construction. There is a concrete floor and concrete piers for bases to support instruments.

CUSTOM-HOUSE—NO. 98 WELLINGTON STREET.

This is a rented building. It is equipped with a new and satisfactory lighting system.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

DOMINION ARCHIVES BUILDING.

Three large rooms, as well as the elevator and stairs, were painted, 650 yards of floor oiled and finished, and 14 coils bronzed.

BIOLOGICAL LABORATORY.

The interior walls and ceilings were tinted and the woodwork painted.

Alterations of and additions to the hot water heating apparatus, electric wiring and plumbing were effected, and a system of electric bells hung.

OTTAWA—*Continued.*

Work done under the supervision of this department.
Superintendent, John Shearer, jr.

DOMINION OBSERVATORY.

Eight cement piers were constructed, the boiler-house floor was renewed, new doors were broken through walls and repairs were made to the cement floors, roofs and chimneys.

Work done under the supervision of this department.
Superintendent, John Shearer, jr.

EASTERN BLOCK.

Twenty-four rooms were cleaned, painted and tinted, the woodwork and the coils bronzed, eight for the Privy Council Department, four for the Indian Affairs, four for the Secretary of State Department, six for the Auditor General's Department, and two for the Finance Department; eleven hardwood floors were laid, six for the Justice Department, two for the Auditor General's Department and three for the Privy Council Department; four new windows were put in for the Privy Council Department; seven cupboards were supplied, four for the Finance Department, one for the Secretary of State Department and two for the Privy Council Department; eleven tables were supplied, four for the Finance Department, two for the Privy Council Department, one for the Secretary of State Department, and two for the Justice Department; three chairs were supplied to the Privy Council Department; seven hardwood chests were supplied, two for the Justice, three for the Secretary of State Department, and two for the Indian Affairs Department; three desks were supplied, one for the Finance Department and two for the Privy Council Department; sixteen drop lights were supplied, nine to the Finance Department, six to the Indian Department and one to the Privy Council Department; seventy-five feet lin. of shelving were furnished the Finance Department; a lavatory basin was fitted up for the Finance Department, which had also a meridian lamp, a desk lamp and some shades supplied; two new windows and frames were put in for the Auditor General's Department.

Fourteen fire screens were supplied, five for the Finance Department, eight for the Privy Council and one for the Indian Affairs; five chair cushions, of which three went to the Privy Council and one each to the Justice and Secretary of State; three fire grates were supplied to the Privy Council; the Indian Affairs Department had four floors oiled, one new window, one lavatory basin, five frames, one name plate and one annunciator; the Justice Department had two frames and 12 files; the Secretary of State Department had one cloth-covered door and one rod and curtain, and the Privy Council had one new partition and one cloth door, besides having three sofas and 12 chairs re-upholstered.

In the stairways there were 2,727 yards of washing and tinting, 142 yards of burlap sized and painted, 200 yards of moulded capping and 33 yards of other painting, besides repairs.

Fifty-two articles of furniture were repaired and fifty-five lights of glass re-glazed.

There were minor jobs, such as lettering, painting, general repairs, &c. The double windows and summer blinds were taken off, stored, cleaned and put on periodically, and the roofs, footpaths and roads were kept free from snow during winter

Work done under the supervision of this department.
Superintendent, John Shearer, jr.

OTTAWA—*Continued.*

GOVERNMENT HOUSE.

A shed for storage of platform stuff and stage scenery, 37 feet by 14 feet by 16 feet, was built; 15 squares of the shingled roof of refreshment room, staircase and passage at curling rink, 17½ squares of shingling of forester's cottage, 4½ squares of galvanized iron roof of ball-room passage and 43 lineal feet of two-feet flashing were renewed; the cow stable roof, which was in danger of collapse, had the walls strengthened and raised three feet and a new roof constructed; under the tennis court, 6½ squares of floor, as well as the wine cellar steps, were taken up and renewed; a cosy corner was constructed in the billiard-room; five chimney-stacks on the wing, and those of the kitchen and the stables, were taken down to roof line and rebuilt in fire-brick with concrete caps; the kitchen hearth was renewed in brick and that of the scullery in cement; in the kitchen a motor-room was fitted up, having a 1½ h. p. electric motor on a concrete base with all necessary shafting, pulleys, and belts for driving the roasting jack; three flights of steps four feet six inches wide by 15 risers each, with handrails, were rebuilt; two plank parapets at skating rink, 120 feet long by 3 feet 6 inches high, were rebuilt; 450 lineal feet of box conduit for wires were laid from rink to log cabin; the basement of new green-house was divided, to form boiler-room, by a wall of cement blocks; 100 lineal feet of land tile drain was laid under cement floor of greenhouse basement to carry off surface water; at the gas-holder house the brick walls of the valve chamber pit were taken down and rebuilt, and a new roof constructed, as well as minor renewals made; the small boat-house at Governor's bay was practically rebuilt and the float enlarged, and the large boat-house thereat had the float practically renewed; the roof and floor of new office building and verandah were fitted up and in part renovated and sections of floors in rooms taken up, the spaces about pipes filled with mineral wool, the flooring replaced and one-quarter round put around floor at skirting.

Three large cupboards, two stepladders, 12 small tables, 208 chairs, 25 trestles, one table, one sofa, 12 stands for ladies' hats, 10 mosquito screens, 10 boxes for silverware, nine chests, 24 packing cases and some shelves and drawers in closets were made for the hall and one cupboard for the cottage; picture rods were put up and two mirrors moved in the ball-room; four panelled doors were made for cupboard-room; 12 window screens and fanlights of tennis court were re-covered; a new cover was made for the soiled linen chest; the cedar curb about five hydrants was renewed; 50 lineal feet of dry stone wall four feet high was built; the store-room in loft was fitted up for storage of double windows and doors; four new sashes and frames were made for carpenter's shop; several additional lengths of tables used for entertainments were made and the porch of temporary green-house was enlarged; 12 boxes with covers were made for cut flowers; 250 boxes were made for bulb planting, and one large frost-proof box for carrying flowers from green-house to hall and cottage in winter. A drain 90 feet long, six feet deep in rock, was laid with a four-inch tile pipe to drain furnace-pit, and the drain from scullery and larder was opened and cleaned. Of painting, papering, tinting, glazing, &c., at the house, cottage, gate lodge, guard-room, laundry and stables, green-houses, outbuildings, &c., there were 3,607 yards of two and three coats of painting, 6,392 yards cleaning and tinting, 276 yards shellacing, 89 yards bronzing, 1,374 feet glazing (repairs), 250 yards japanning, 88 yards enamelling, 1,385 yards lime washing, 484 rolls of paper hung, 11 blinds painted and 212 chairs scraped, stained and shellaced.

For the green-houses there were made 28 curtains with wire guards, cords and pulleys; 35 portable screen frames; 60 tubs for palms (painted); two doors and two window frames made and set in wall; 12 plant stands; 375 feet of shelving; additions to tables, and some additional pipe in heating surface.

OTTAWA—*Continued.*

At the hall, there was supplied and laid 649 yards carpet (Brussels, Wilton and tapestry); 38 yards cork matting, 19 yards cocoa matting and 54 yards of Wilton carpet with 15½ yards of linoleum at the cottage.

A moderate supply of napery, kitchen utensils, cutlery and upholstery furnishings, mainly renewals, was supplied, and also 18 ensigns, 15 Quebec heaters, 250 Japanese lanterns, 158 Chinese lanterns, two dozen tubular lanterns, eight 1-light electric lamps, and 10 silk shades. For the hall, there were supplied two china toilet sets, two bath sets, six chamber sets, six dozen pieces stoneware, three ewers, seven dozen china cups and saucers and 230 pieces of glass, and, to the cottage, one dinner service, 106 pieces of chinaware, two chamber sets and 170 pieces of glassware, besides which a quantity of china and glassware was hired for entertainments as occasion demanded.

Four thousand one hundred yards of carpet and 23 rugs and mats were taken up and relaid, 87 chairs were re-seated; 12 stepladders and 50 trestles were repaired, and four wheelbarrows and one hose reel rebuilt.

For the kitchen garden there were supplied six frames and 18 sash for hotbeds, 18 frames for melons, two water tanks, fertilizers, seeds, fruit trees, plants, &c., as well as bulbs, flower stakes, pots, labels, seeds, implements, insecticides, &c., for the flower garden. A stile and steps were built leading into the potato field.

The ranges, heating, plumbing, lighting, electric bells and drainage were repaired and minor renewals made to same.

The lodge, at main entrance gateway, was overhauled, repaired, tinted, papered, painted; a new entrance doorway substituted for the old one, and the eavestroughs and conductors repaired and renewed. Two hundred lineal feet of boundary fence and 275 lineal feet ten-foot board fence were rebuilt, and there were built 460 lineal feet of seven-foot fence and 250 lineal feet of picket fence, besides five new gates and their posts. All the plank footpaths and crossings were repaired, a new walk was laid at lodge gate and a section of cement foot path 150 feet in length, destroyed by frost, had a new surface coat. Some grading, including the supply of a quantity of new soil, and the laying of a new drain, was done about the green-houses.

The conservatories were kept in order, the hay was cut and housed, the lawns, drives, &c., rolled and otherwise tended. The ice-house was stored with ice. The roofs, paths, slides, rinks, &c., were cleared of snow by the departmental staff, by whom the grounds, lawns, gardens and plant-houses were maintained. The curling and skating rinks were flooded and tended, and the toboggan slide was kept in order.

The usual periodic cleaning, packing and unpacking were done; arrangements for and attendance on entertainments were furnished, and the rinks, slides, &c., kept in order.

Work done under the supervision of William Hutcheson, superintendent.

GEOLOGICAL MUSEUM, SUSSEX STREET.

The metal roof covering was repaired, a large amount of cleaning, tinting and general repairs were done; some sinks were lined and tables covered with lead; a number of cupboards and electric lights, as well as 68 lights of glass, were supplied and general ordinary and usual repairs effected.

Works done under the supervision of this department.

Superintendent, John Shearer, jr.

LABOUR DEPARTMENT.

This is a suite of rented offices, situated on Metcalfe street, opposite the Langevin Block.

OTTAWA—*Continued.*

Some shelving was put up; three cloth-covered doors, three tables and four pigeon-hole cases were supplied, and repairs done to furniture.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

LANGEVIN BLOCK.

In the Agriculture Department, 14 rooms were cleaned and tinted; 102 lights were glazed; one wash basin was fitted up; 725 feet of picture moulding were put up; there were supplied three cupboards, 14 deflectors, 12 packing cases, two coal boxes, one mail box, five stepladders, two ventilators, 20 screens, six tables, 125 feet lineal of shelving, 10 brass rods and curtains, six chair cushions, 28 drop lights, two annunciators, 16 desk lamps, one 6-light fixture, one 4-light, one 3-light and one 2-light, 24 shades and coat and hat racks; in the Post Office Department a door was opened from the minister's office into the vestibule, two new windows were put in and seven rooms were cleaned and renovated; in the Interior Department the mail-room was enlarged, 16 articles of furniture were repaired, and there were provided two pieces of glass partition, two sets of tripods, eight cupboards, 30 chair cushions, seven stepladders, 36 flower boxes, eight window poles, 20 brass rods and curtains, six foot-stools, 35 tables, six desks, two map racks, four window deflectors and two lock cases; 48 articles of furniture were repaired.

General repairs were effected to carpentry, plastering, cement, joinery, painting and glazing.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

MAJOR'S HILL PARK.

New clumps of shrubbery were set out; the hedge skirting the cliff was taken down and replaced by a wire fence; a number of new paths were laid out; a new area was sodded; paths were renewed, and an unusually large number of tulips and hyacinths were bedded. New flower boxes were supplied, and the benches, hotbed sashes and fence painted.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

PARLIAMENT BUILDINGS.

The ventilation system is now practically complete. In the House of Commons wing, six new windows were placed and the incidental plastering, carpentry, painting, &c., done; an entrance from the sergeant-at-arms' quarters to chief messengers' quarters, necessitated by the new addition to the Commons wing, was made; the heating of the Public Accounts Committee room was altered, as also the seating arrangement; a new press table was supplied, the walls were tinted and the windows repaired. The elevator shaft was painted; 14 rooms, together with corridors and lavatories, were cleaned and tinted; hardwood flooring was laid in two rooms and the hardwood floors throughout treated; 92 lights of glass were re-glazed, and the apartments of the sergeants-at-arms, as well as those of the chief messenger, were papered, painted, &c. In five rooms, picture moulding was put up, and there were provided four tables, one deflector, three ventilators, 22 picture frames, four brass rods and curtains, eight bookcases, three chests, three screens and 60 feet lin. of shelving. Of electric fixtures, there were supplied five of 3-light, two of 4-light, nine drop lights, five desk lamps, two electric clocks, and all necessary wiring, cutouts, switches, &c. There were 92 chairs and two sofas, besides a large number of other articles of furniture repaired, and there were 92 lights glazed.

OTTAWA—*Continued.*

In the Senate, the corner stone was re-lettered in gold leaf; rubber tile flooring was laid in the main corridors; the kitchen was moved to the west end of the basement and the room formerly used as such was made into a ladies' reception room; the kitchen in the chief messenger's apartments was overhauled and cleaned; the rooms and corridors of the basement were cleaned, tinted and painted; the Senate dining-room and ladies' drawing-room were papered and decorated, including a burlap dado; the Speaker's bedroom had the walls repanelled in paper, the ceiling tinted and the woodwork painted; six new windows were set in the Speaker's bedroom; a new bath-room and lavatory was fitted up in the basement for the use of the steward and his assistants, and the kitchen was equipped with a 'John Bull' steel range. There were supplied three cupboards, three pieces of panelled partition and four doors and frames; 20 sofas, and the furniture of the Speaker's drawing-room were re-covered, and 44 chairs and other articles of furniture repaired. The cement floors throughout were repaired, and 82 lights were re-glazed.

At the Library, a new gas stove was placed in the kitchen of the housekeeper, who had also a new bath, sink and lavatory basin fitted up; a number of the heating coils were altered, and 78 lamp guards and grips, four drop lights and one desk lamp were placed.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

PARLIAMENT BUILDINGS, ADDITION, ETC.

This work, which was described in my report of last year, has been carried on continuously, and is expected to be completed during the next fiscal year.

Plans, &c., prepared by this department.

Clerk of works, S. Adams.

Contractors, W. H. MacGillivray and P. Labelle.

PARLIAMENT GROUNDS.

The lawn between the Western Block and the conservatory was graded and re-sodded, forming a bowling green; the scoria block pavement at the Wellington street entrances was taken up and replaced by Nepean stone sets; a new entrance porch was added to the green-house; a cement walk was laid to the elevator entrance of the West Block; some of the roadways were graded up; ordinary and usual painting and other works of repair were carried on, and an unusually large number of shrubs, trees and herbaceous plants, as well as bulbs, were planted.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

RAILWAY COMMISSION—WOODS BUILDING (66 QUEEN ST.).

This is a rented building.

Picture moulding was put up in two rooms; the corkene floor covering was varnished; the doors were re-lettered; one large room was cleaned and tinted; there were supplied seven cupboards, three tables, three window deflectors, eight boxes, two step-ladders, two rods and curtains, six window poles, one wash basin, two annunciators, four disinfectors, one electric fan, four drop lights, twelve prism shades and one wall bracket; repairs were made to 21 articles of furniture, and a large number of fittings, &c., were cleaned and varnished.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

OTTAWA—*Continued.*

REPAIRING STREETS, ETC.

A footpath, 270 feet in length by 3 feet 4 inches in breadth, was constructed along the south side of St. Patrick street; scraping, cleaning and general repairs were done to the various roadways, footpaths and streets under the control of the department.

Rubbish, scrapings and ashes were removed from the East Block, West Block, Langevin Block, Parliament Buildings, workshops, Printing Bureau, Museum, Archives Building, Military Stores Building, Mint, the several rented buildings and the various streets, and deposited at Nepean Point; the grass at Printing Bureau, about Cartier Square, Wellington street, two bridges, Survey Office, Fisheries Museum, Archives Building and Geological Museum was kept clipped; manure was drawn on and removed therefrom, and the ashes removed from the boiler-houses and furnace-rooms of the various buildings; the roadways, sidewalks, footpaths, roofs and yards were kept clean of snow during the winter.

Work done by the departmental staff.

BRANCH OF ROYAL MINT.

Concrete piers were built, reaching from the rock below the concrete floor of basement up through flooring of ground floor, to support balances ,and there were supplied 20 cabinets and cupboards, two porches, one set of steps, 40 birch tables, two models, 36 sorting trays, three fume chambers, six grinding boards and one tool cabinet.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

ROYAL MINT.

Guard-house, Iron Gateway and Iron Boundary Fence.

The guard-house consists of two detached one-story guard-rooms flanking the entrance gateway, and situated at the angle of Water street and Sussex street. Each of them measures, over all, about 20 feet by 16 feet. One is arranged for a guard-room and the other a guard's waiting room; each has an entrance only from the yard, and the latter is provided with lavatory, w. c., &c. There is a fire-place in each room.

These buildings are similar in materials and style to the Mint building. The boundary fence is of iron rods 12 feet in height and set on a granite coping resting on a concrete foundation.

Plans and specification prepared by this department.

Clerk of works, Geo. Stockam.

Contractors, Sullivan & Langdon.

SUPREME AND EXCHEQUER COURTS.

The library extension referred to in last year's report is completed. In the Supreme Court a number of the offices and corridors had to be re-plastered and the cement floors of corridors repaired. The lavatory of the Exchequer Court was tiled. A burlap dado with wood capping was placed in the corridors; 18 rooms, together with the court-room and entrances, were cleaned, tinted, painted and varnished, had

OTTAWA—*Continued.*

new carpets and the furniture renovated. New curtains and blinds were supplied to the windows, and there were further supplied: eight brackets, 100 feet lineal of shelving, two cloth-covered tables, three office tables, six book-cases, four pigeon-hole cases, one cabinet, four wash basins, five radiators, one 3-light fixture, two annunciators, two electric clocks, seven desk lamps, one electric heater and iron, six drop lights, 22 Nerst lamps, together with fixtures, bells, brackests, &c. The old portion of the Supreme Court library was re-equipped for electric lighting. Twenty-five chairs were repaired and six chairs, as well as the cushions of the court-room, were re-upholstered.

Work done by the departmental staff under the supervision of John Shearer, jr., superintendent.

VICTORIA MEMORIAL MUSEUM.

This work, which was described in my report of last year, was continuously under construction during the summer and autumn of 1907.

Plans and specification prepared by this department.

Clerk of works, P. Canty.

Contractor, George Goodwin.

WESTERN BLOCK DEPARTMENTAL BUILDING.

The room on the Wellington street front in attic, formerly used as the chief architect's draughting-room, was divided into three offices and a corridor; a water filter was placed on the four-inch main; the main corridor and stairways are being washed and tinted and finished with a burlap dado involving, up to the end of the fiscal year, 4,035 yards of washing and tinting, 625 yards of burlap, sized and twice painted, and 1,940 feet of moulding capping; 70 doors were grained and varnished, and in the stairways there were 397 yards of painting done.

Sixty-five rooms were cleaned, tinted and painted, 22 being for the Public Works, 14 each for the Railways and Canals and Inland Revenue, 12 for the Customs, and three for the Marine and Fisheries; 24 rooms were floored in hardwood, 11 in the Public Works, five in the Customs, three in the Marine and Fisheries, and two each in the Railways and Canals and the Mounted Police; 15 brass rods and curtain sets were supplied, 12 in the Railways and Canals and three in the Customs; 49 cupboards were supplied, 27 to the Customs, 10 to the Public Works, seven to the Marine and Fisheries and five to the Inland Revenue; 27 tables were supplied, 11 to the Customs, seven to the Railways and Canals, three each to the Marine and Fisheries and Public Works, two to the Inland Revenue, and one to the Trade and Commerce; 10 fire-screens were provided, four each for Railways and Canals and two for the Customs; 15 electrical cabinets were provided for the Public Works; eight cabinets were provided, six for the Public Works and two for the Customs; 33 stepladders were provided, 17 for the Customs, 10 for the Railways and Canals, and three each for the Public Works and Marine and Fisheries; 11 pigeon-hole cases were provided, seven for the Public Works and four for the Customs; 13 deflectors were supplied, seven for the Customs and six for the Marine and Fisheries; 480 packing cases were provided, 345 for the Public Works, 110 for the Customs, and 25 for the Railways and Canals; 54 boxes were provided, 48 for the Public Works, four for the Trade and Commerce and two for the Inland Revenue, besides seven brass-bound chests for the Public Works; five cloth-covered doors were provided and hung, three for the Public Works and two for the Railways and Canals; 19 chair cushions were supplied, 13 for the Public Works and six for the Marine and Fisheries; five book-cases were supplied,

OTTAWA—*Continued.*

three for the Marine and Fisheries and two for the Public Works; nine wash basins were provided and connected, four for the Public Works, four for the Inland Revenue, and one for the Customs; two desks were supplied to the Customs; picture moulding was put up in 11 rooms, four each in the Customs and Public Works, and three in the Railways and Canals; 26 stretchers were supplied, 23 to the Public Works and three to the Railways and Canals; 100 signs lettered in gold and one name plate were supplied to the Customs, and six signs to the Public Works; 27 frames were supplied, 25 to the Public Works and two to the Mounted Police; coat and hat strips were supplied to the Inland Revenue, Trade and Commerce and Public Works; 13 desk lamps were supplied, five to Customs, six to Marine and Fisheries and two to Inland Revenue; 57 drop lights were supplied and wired, 20 to Customs, 17 to Public Works, 13 to Marine and Fisheries and seven to Inland Revenue; of electroliers there were 15 five-light fixtures supplied and wired for the Inland Revenue and two for the Public Works, two four-light fixtures for the Customs, and one six-light for the Marine and Fisheries; 18 shades were supplied to the Customs and eight to the Inland Revenue; eight heating coils were fitted up, four each for the Customs and Public Works; eight annunciators were supplied, six to the Customs and one each to the Inland Revenue and Public Works; one set of gas logs was fitted up for the Customs; the Public Works was supplied with three electric fans, six Nerst lamps, seven ice boxes, three drawing boards, 10 trestles and 90 feet lineal of shelving; the Inland Revenue was supplied with two sinks, three lead-covered tables, three electric heaters, one brick partition and one oak partition; the Trade and Commerce were furnished with two ventilators and had two sashes re-glazed; the Marine and Fisheries had two glazed partitions erected and the mail office fitted anew at end of corridor, besides having 41 stands provided; 637 lights of glass were re-glazed.

There were also repairs to 151 articles of furniture, as also minor jobs of painting, lettering and of joinery. The roofs, roads and footpaths were kept free from snow. The winter sashes and summer blinds were cleaned, put on, taken off and stored periodically.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

WOODS BUILDING, SLATER STREET—DEPARTMENT OF MILITIA.

This is a rented building. Five rooms were cleaned and tinted; 74 lights were glazed; a two-station Deveau telephone system was put in; 55 lineal feet of shelving were put up; a doorway was broken through between rooms 5 and 6; 61 cupboard doors were supplied and hung; there were supplied seven window deflectors, five stools, six brass rods and curtains, five step ladders, two cupboards, two screens, six cushions, 27 drop lights, 11 desk lamps, one bracket light, five shades, one electric blower fan and one equipoise telephone arm; 15 articles of furniture were repaired, as well as the plumbing and heating.

Work done under the supervision of this department.

Superintendent, John Shearer, jr.

RENTED BUILDINGS.

List of buildings rented in the city of Ottawa by the government as follows:—

'The Great North Western Telegraph Co. building,' Metcalfe street, occupied by the Militia and Labour Departments.

'Imperial Building,' Queen street, occupied by the Interior and Public Works Departments.

OTTAWA—*Continued.*

'The Molsons Bank Building,' Metcalfe street, occupied by the Labour Department.

'Imperial Realty Co., Ltd.,' Woods Building, Slater street, occupied by Militia, Inland Revenue and Interior Departments.

'Mrs. Victoire Dubé Building,' Sussex street, occupied by French translators.

'The Ottawa Building Co., Ltd.,' Wellington street, occupied by Customs Department.

'F. G. Johnston & Co. Buliding,' Sussex street, occupied by Geological Museum.

'The Egan Estate Co., Ltd.,' Sparks street, occupied by Justice Department.

'Slater Estate,' lot No. 11, Wellington street, occupied by Public Works Department as yard.

'J. A. Corry Building,' Rideau street, occupied by Georgian Bay Ship Canal Survey, International Waterways Commission, Upper Ottawa River Works, Marine and Fisheries and Public Works Department.

'The Ottawa Building Co., Ltd.,' cor. Metcalfe and Slater streets, occupied by Interior Department.

'Slater and Sherwood,' Wellington street, occupied by Mounted Police Department.

'Imperial Realty Co., Ltd.,' Canadian Building, Slater street, occupied by Interior, Agriculture, Railways and Canals and Marine and Fisheries.

No. 66 Queen street, occupied by Railway Commission.

'Slater and Sherwood Building,' Sparks street, occupied by Post Office and Interior Departments.

'The Ottawa Investment Co.' corner Queen and Metcalfe streets, occupied by Agriculture Exhibition Commission.

'Ahearn & Soper, Ltd.,' 56½ Sparks street, occupied by Public Works Department, Georgian Bay Ship Canal.

'The Royal Trust Co.,' Thistle Block, Wellington street, occupied by Interior Department.

'Trafalgar Building, Bank street, J. C. Brennan, occupied by the Interior Department.

'The Ottawa Building Co., Ltd.,' corner of Metcalfe and Slater streets, occupied by Interior Department, Surveys branch.

BUILDINGS AND GROUNDS GENERALLY.

In addition to the works mentioned in the foregoing, there are innumerable smaller works, *i.e.*, there are items of repair done by the roofers, the masons, plumbers and other trades; items taking each a number of days' work of a tradesman, besides material to accomplish. Besides all these, in connection with the various other buildings, the property of the government, there are similar works of repair, painting, furnishing, tinting, &c., in connection with a number of rented buildings; also such works as repairs to and renewals of coal and other sheds, as well as works of a general character, such as the erection and taking down and storing of porches, winter boarding outside steps, &c., all of which are done by the departmental staff.

OWEN SOUND.

PUBLIC BUILDING.

A contract for the construction of this building, on the corner of Baker and Scrope street, was entered into on April 8, 1907. It is a two-story and basement stone building measuring on plan 82 feet by 52 feet.

OWEN SOUND—*Continued.*

The walls are lined with brick and there is a brick vault on ground floor and another on first floor. The stairway is of iron with slate treads, and the floors, roofs and partitions are iron and concrete, excepting the basement partitions, which are of brick. All the external walling, excepting that of the first floor in rear and of the south elevation, which is rock-faced, are of cut stone, as also all the dressings, quoins, string courses, plinth, freize, cornice, pediments, coping and steps throughout. The entrance steps are granite, and there are two pairs of granite engaged columns with Ionic caps to each flanking pediment on Baker and Scrope street elevation.

The basement is for heating apparatus and stores; the ground floor contains the post office, stairway, w.c. room, examining warehouse and brick vault, and the first floor contains the Customs and Inland Revenue offices, w.c. room and brick vault.

Plans, &c., prepared by this department.

Resident architects, Foster and Clark.

Contractors, Nagle and Mills.

PETERBOROUGH.

CUSTOM-HOUSE.

A fire escape was affixed to the building; some tinting, plumbing, painting and rewiring were effected and some linoleum and carpets supplied. All under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

DRILL HALL.

A contract was entered into on February 28, 1907, for the construction of the building. It has a frontage of 170 feet on the Central Park and extends along Murray street a length of 254 feet to a lane in the rear.

The main body of the building has a breadth of 115 feet, but there are two projections on Murray street corners each 14 feet deep, one 44 feet and the other 62 feet in length, while on the opposite side of the building there are two projections, each 41 feet deep, one 58 feet and the other 61 feet in length.

The basement extends along Murray street 192 feet from the Park front by a depth of 44 feet on the corner and 30 feet on the remainder of its course along Murray street; it extends 126 feet along the Park front by a depth of 26 feet. The remainder of the basement area is unexcavated. The ground floor contains a main hall 176 feet by 80 feet, a gun shed 80 feet by 40 feet, a wagon shed 40 feet by 44 feet, cavalry armoury and harness room, cavlary stores, cavalry C. O., artillery harness, artillery stores, artillery orderly, infantry stores, infantry C. O., infantry adjutant, infantry orderly, infantry Q. M., signal corps, stretchers company, eight armouries, lavatories, stairways, halls and entrance halls. The first floor is limited to a strip along the Park frontage and two blocks on the rear corners, and contains in the front portion the officers' mess, the sergeants' mess, lecture hall and billiard room; in the rear blocks, the recreation rooms and band rooms.

The walls are of brick with stone dressing on a stone basement.

Plans, &c., prepared by this department.

Contractor, George A. Proctor.

PETROLEA.

PUBLIC BUILDING.

A fire escape was affixed to the building, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

PORT ARTHUR.

ADDITION TO POST OFFICE WORK ROOM.

This is a one-story brick addition on a stone foundation situated in the rear of the work-room and extending from the examining warehouse towards Court street 38 feet by a depth of 36 feet. The examining warehouse roof was altered to agree with the new work. The walling between the post office work room and the addition is removed on the post office flat and the wall above supported on box girders carried on iron columns.

Plans, &c., prepared by this department.

PORT HOPE.

PUBLIC BUILDING.

The floor of the post office was laid in maple and the interior walls and ceilings of the building were cleaned, tinted and the interior woodwork painted.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

RENFREW.

PUBLIC BUILDING.

On April 6, 1908, a contract was entered into for the construction of this building on a plot of ground having a frontage of 95 feet on Main or Raglan street.

The building will consist of a main portion measuring 50 feet frontage by 40 feet in depth, having two stories, basement and attic, and an adjunct in rear measuring 22 feet by 27 feet, and having two stories and an unexcavated basement.

The main portion consists of a basement for heating apparatus and fuel, a ground floor for the post office, a first floor for Customs and Inland Revenue offices and an attic for living apartments; there being a w.c. room on the first floor and a bath and w.c. in the attic. The adjunct consists of a ground floor containing an examining warehouse, a weights and measures office and a w.c. room, and a first floor containing living apartments.

The basement walls below ground are of concrete and the remaining walls of stone backed with brick. The floors, stairs, roofs and partitions, excepting the basement floor which is of concrete and the basement partitions which are brick, are of wood, the main building roof is covered with metal and the adjunct roof with tar and gravel composition. The external steps, excepting the platform and steps in rear at examining warehouse which are of concrete, are cut stone.

Plans, &c., prepared by this department.

Contractors, Joseph Bourque & Co.

SARNIA.

PUBLIC BUILDING.

Addition to Post Office Work-room.

A contract was entered into on July 20, 1907, for the construction of a one-story brick addition on a stone basement in rear of the post-office work-room, 25 feet 4 inches in depth and extending 53 feet in length from the examining warehouse along the rear wall of the post office.

The addition involves alteration of the roof of the examining warehouse, removal of the external stairway to basement and the removal of that portion of the rear wall which is between the post office work-room and the addition, the wall above which has to be supported by girders carried on iron columns.

SARNIA—*Continued.*

Plans and specification prepared by this department.
Clerk of works, R. W. Fawcett.
Contractors, Robert Carrick & Son.

MAIN BUILDING.

A fire-escape was fixed to the building; alterations of electric lighting were effected; the caretaker's quarters were cleaned, papered and painted, and there were some window awnings supplied.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

ST. MARYS.

PUBLIC BUILDING.

This building, which was described in my report of last year, is completed, fitted up and furnished, wired for electric light and supplied with a hot water heating apparatus. The attic, which was described previously as unfinished, has been divided into rooms by plastered partitions, a bath, w.c., lavatory basin and water supply, wiring and heating installed, and the entire flat made suitable for living apartments for the caretaker.

Plans, &c., prepared by this department.
Clerk of works, J. C. Wiederhold.
Contractor for construction of building and fittings, Robert Cameron.
Contractor for heating apparatus, Macdonald & Henry.
Contractor for electric wiring, L. H. Reesor.

ST. THOMAS.

PUBLIC BUILDING.

The caretaker's apartments were painted and some furnishings for Collector of Customs office supplied. All under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

STRATFORD.

PUBLIC BUILDING.

A bath-room was fitted up in the caretaker's quarters, and the lighting, plumbing and woodwork of the post office were repaired.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

SIMCOE.

PUBLIC BUILDING.

A contract for the construction of this building, which fronts on Peel street and is flanked by Kent street, measures 67 feet long by 58 feet in depth, was entered into on January 15, 1908. It is to be a brick one-story building, with cut stone dressings and a stone basement.

The flooring of the basement is to be concrete and of the ground floor wood; there is to be a brick safe-room on ground floor; the partitions, excepting a number of those on ground floor, which are wood, are to be of brick, and the roof is to be of wood carried on iron beams and covered with tar and gravel. The external cornice,

SIMCOE—*Continued.*

coping, string course quoins and window dressings are to be of cut stone. The drainage is to be into a cesspool in a yard.

In the basement are furnace, fuel, stairway and toilet-rooms; on the ground floor are to be the post office, examining warehuse, vestibule, an office each for the Customs Collector, Inspector of Weights and Measures and the Inspector of Gas; also a toilet-room for ladies, containing two water closets and a lavatory basin.

Plans, &c., prepared by this department.

Clerk of works, Howard Fairchild.

Contractors, Schultz Bros. Co.

STRATHROY.

INFANTRY COMPANY ARMOURY.

On November 27, 1907, a contract was entered into for the construction of this building situated on the corner of Frank and James streets. The building measures 49 feet by 48 feet on plan, comprises two stories of brick on a concrete stone-faced basement and with brick partitions; the floors, stairway and roof, excepting the basement floor which is concrete, to be of wood.

Only a portion of the basement is to be excavated to provide furnace and fuel rooms. On the ground floors are to be two infantry company armouries, a Q.M. stores, two company C.O. rooms, a stairway hall and a vestibule; on the first floor a lecture room, a regimental C. O. room, an adjutant's room and a clerk's room.

Plans, &c., prepared by this department.

Clerk of works, George MacBeth.

Contractors, Nagle & Mills.

TORONTO.

DRILL HALL EXTENSION.

This work, which was described in my report of last year, is practically completed. Hot water heating and electric lighting services are installed.

Plans, &c., prepared by this department and work supervised by S. G. Curry, architect.

Contractors, Sullivan & Langdon.

ASTRONOMICAL OBSERVATORY.

A contract was entered into on January 28, 1908, for the construction of a meteorological building, a workshop and a building for use as chronometer and transit houses, at the corner of Bloor street and Devonshire Place. The meteorological building measures 90 feet by 60 feet, exclusive of an observation tower circular in plan, 24 feet in diameter, 48 feet in height from ground level to spring of dome, and projecting from the rear end wall 14 feet.

The building consists of two stories, basement and attic. The walls are of brick, stone-faced; the partitions of brick; the floors, roof and stairway of steel and concrete; the roof covering of copper. The basement is to contain a boiler room, coal bunkers, a test room, a room for seismograph and barograph, a lavatory and water closet room, a stairway hall and messenger's room; on the ground floor are to be the director's office, the secretary's office, the record room, two offices for other officials, a ladies' water closet room and toilet room, a staircase hall and a room in the observation tower for

TORONTO—*Continued.*

magnetic records; on the first floor, a library, a telegraph office ,a photographer's room, a dark room, an instrument and store room, three offices for officials, a water closet and lavatory room, a sink room for charwomen, a vault for records in the observation tower and a staircase hall; the attic is undivided excepting by the corridors and stairway hall.

The corridors on each flat divide the building into four subequal parts, one corridor extending across the building from front entrance to rear entrance and the other bisecting the building longitudinally from the observation tower to the end wall.

The chronometer and transit houses consist of a one-story chronometer room 32 feet by 14 feet, adjoined to which is a one-story transit house 20 feet by 9 feet; both of brick with floors and roofs of wood, the latter copper covered. The workshop is a 1½ story building, of the same description, measuring 45 feet by 18 feet on plan.

Plans and specification prepared and work supervised by Burke and Horwood, architects, Toronto.

Contractors, Brown and Love.

CUSTOM HOUSE.

A fire escape was fixed to the building; the offices, corridors and stairway were painted, and there were supplied a steel safe, filing cases and furniture; all under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

POST OFFICE ADDITIONS AND ALTERATIONS.

A two-story brick addition on stone foundation walls and brick foundation piers is being constructed on the western side of the post office fronting on Lombard street; it is 56 feet in breadth by a depth of 91 feet. The outside cornice is of wood, metal covered; the roof, stairs, and flooring of first floor are of wood; the ground floor is of concrete, wood covered, and the floor of the driveway is asphalt. There is a stairway occupying nearly the entire breadth of the ground floor of the Lombard street front by 20 feet in depth.

Contractor, George Henry.

Plans and specification prepared by this department.

In the post office, a new box screen was erected, and inside screens, cases and tables supplied; new electric wiring, fixtures, switchboard and office 'phones were installed; the boilers were furnished with fuel savers and grates, and some interior painting was done.

Work supervised by Thos. H. Hastings, of this department, Toronto, Ont.

POSTAL STATION 'F.'

This building, which was described in a previous report, is completed.

Plans and specification prepared by this department and work supervised by S. G. Curry, architect.

Contractors, Brown & Love.

Contractors for hot water heating system, Bennett & Wright.

Contractors for post office fittings, Chas. Rogers & Son Co

Contractors for electric wiring, McDonald & Wilson.

WALKERTON.

INFANTRY ARMOURY.

On August 15, 1907, a contract was entered into for the construction of this building. It is to be a two-story brick building with stone dressings, on a concrete stone-faced basement, measuring 38 feet by 40 feet on plan.

The partitions are to be brick and the floors, roof and stairway of wood, excepting the basement floor, which is to be concrete. The basement contains the stairway hall, the furnace-room, a fuel-room and two store-rooms; on the ground floor are the company C. O. room, mobilization store, company armoury, water closet-room and stairway hall, and on the first floor a lecture-room, a regimental C. O. room, an adjutant's room, a clerk's office and a stairway hall. Heating is by hot water.

Plans and specification prepared by this department.

Clerk of works, John Henderson.

Contractors, R. E. Truax & Co.

WINGHAM.

PUBLIC BUILDING.

Some articles of furniture, a number of window shades and some matting were supplied the post office; plate glass was glazed in front window, and the cesspool was repaired and cleaned.

WOODSTOCK.

PUBLIC BUILDING.

A fire-escape was affixed to the building, under the supervision of Thos. H. Hastings, of this department, Toronto, Ont.

PROVINCE OF MANITOBA.

BIRTLE.

IMMIGRATION STATION.

This is a one-story wooden building, measuring 40 feet by 20 feet on plan, which was built in the Canadian Pacific Railway station grounds at Birtle, Man., in 1886. In February, 1908, tenders for its purchase and removal were invited and on March 30, 1908, a sale was made.

BRANDON.

ARMOURIES BUILDING.

On August 22, 1907, a contract was entered into for the construction of this building, facing Victoria street. It consists of a drill hall 120 feet by 75 feet, the long axis at right angles to the street, and, between the hall and the street, an armoury building having a frontage of 90 feet by a depth of 23 feet. The middle portion of the armoury building, 43 feet in length, has three stories and basement, and the remainder, two stories and basement.

BRANDON—*Continued.*

The basement contains the shooting gallery, a furnace-room, a fuel-room, a store-room, a w.c. room, a lavatory and a stairway hall; the ground floor story a saddlery room, a cavalry room, an infantry armoury, a cavalry C.O. and orderly-room and the main entrance and stairway hall; the first floor lecture-room, an infantry armoury, an infantry C. O. and orderly room and the stairway hall, and the third floor the caretaker's apartments. The ground floor story opens by three entrances into the main hall, and the first floor by one entrance on the gallery which extends along the entire end abutting the armoury section.

The basement and foundation walls are stone and the remaining walls and the partitions mainly are of brick with stone string courses, copings, sills, &c. The floors of main hall and basement are concrete, and the remaining floors, the stairways and roof are of wood, excepting the framing of the main hall which is of iron.

Plans and specification prepared by this department and work supervised by Thos. Sinclair, architect.

Contractors, Dumais and Lachance.

PUBLIC BUILDING.

The entrances and box screen were rearranged, a new stamp vendor's box was erected, and a fire-escape affixed to the building.

Work done under the supervision of Jos. Greenfield, superintendent of public buildings, Manitoba, Winnipeg, Man.

IMMIGRATION BUILDING.

The interior of the building was cleaned, painted and tinted, under the supervision of Jos. Greenfield, superintendent of public buildings, Manitoba, Winnipeg, Man.

MINNEDOSA.

IMMIGRATION STATION.

This is a one-story wooden building, measuring 40 feet by 20 feet on plan, which was built in the Canadian Pacific Railway station grounds at Minnedosa, Man., in 1886. In February, 1908, tenders for its purchase and removal were invited, and on March 30, 1908, a sale was made.

NEEPAWA.

PUBLIC BUILDING.

On January 27, 1908, a contract was entered into for the erection of this building on Mountain avenue and Cameron streets. It is to be a two-story brick building with stone dressings and on a concrete stone-faced basement measuring 65 feet by 48 feet.

The partitions in basement and ground floor as well as a number of those on first floor are brick and the remainder wood. There is a brick vault on ground floor and first floor and the basement walls are brick-lined. The stairs, floors and roof, excepting the basement floor which is concrete ,are of wood and the roof covered with tar and gravel. The external cornice, freize and coping are covered with metal. There are stone steps to external entrances and a concrete platform at rear for examining warehouse.

The basement is designed for heating apparatus, fuel and stores; the ground floor for the post office and examining warehouse, and the first floor for the customs offices, militia armouries and w.c. rooms, of which there are separate apartments, for men and women.

Plans, &c., prepared by this department.

Clerk of works, George Kellington.

Contractors, Fussee McFeetors Company, Ltd.

ST. BONIFACE.

PUBLIC BUILDING.

This building, which was described in my report of last year, is still in progress, and is being fitted up with a hot water heating apparatus and electric wiring.

Plans, &c., prepared by this department.

Clerk of works, Stanislas Paquette.

Contractor for construction of building, I. McDiarmid.

Contractors for heating and wiring, Laplante and Fournier.

SELKIRK.

PUBLIC BUILDING.

A contract for the construction of this building, on the corner of Main street and Manitoba avenue, was entered into on October 14, 1907. It is to be a two-story brick building with stone dressings and on a stone basement measuring 44 feet in breadth by a mean depth of 58 feet.

There are brick safes on each floor and a number of the partitions are brick. The floor of the boiler room in basement is finishesd with cement, but the remaining floors, partitions, roof and stairs are of wood. The cornice, coping and freize of the external walls are of wood covered with galvanized iron and the roof is covered with felt and tar composition.

In the basement are the boiler room, brick safe room, customs office, postal stores, w.c. room and stairway hall, while on the ground floor ,are the post office, brick safe room, lavatory room and stairway hall, while on the first floor are three offices for the Indian Department, two offices for the Timber Department, one office for the Fisheries Department ,a brick safe room, a lavatory and w.c. room and a room for storage containing a slop sink.

Plans and specification prepared and work supervised by James Chisholm, architect.

Clerk of works, Henry Bird.

Contractors, Brown & Garson.

FORT OSBORNE, WINNIPEG.

GUARD-ROOM, OFFICES AND STORE BUILDING.

On September 12, 1907, a contract was entered into for the construction of this building. It is a two-story brick building with stone dressings and on a stone basement, measuring 82 feet in length by 31 feet in breadth exclusive of four semi-octangular bays, two each on front and back, each measuring 15 feet long, projecting seven feet from wall line and reaching the entire height of the building.

Only a portion of the basement, sufficient for the heating apparatus and fuel is excavated.

The ground floor consists of two equal blocks separated by a driveway 17 feet by the depth from front to rear, the driveway being restricted to this story. One of the blocks, contains a guard-room, a vestibule, a prisoner's room, three cells a water-closet-room and a lavatory-room, while the other block contains, an office, an entrance hall, a staircase hall and a store-room. On the first floor are a lecture-room, an orderly-room, a C. O. room, five offices, a staircase hall, a corridor and a combined lavatory and w.c. room.

The partitions, excepting a small number on first floor, which are wood, are of brick; the floors in basement and in ground floors, excepting those of stairway hall and office, are of concrete, and the remainder as well as the stairs, roof and a part of the

FORT OSBORNE, WINNIPEG—*Continued.*

first floor partitions, are of wood. The archways of the driveway, the wall copings, string and plinth courses, &c., are of cut stone.

Plans, &c., prepared by the department.

Contractors, J. McDiarmid & Co.

QUARTERS FOR MARRIED N.C.O. AND MEN.

On November 13, 1907, a contract was entered into for construction of this building.

It is a range of eight dwellings, measuring 168 feet in length, by 33 feet in depth, each dwelling consisting of a basement containing a laundry, a cellar and a store-room; a ground floor containing a kitchen, a living-room, a stairway hall and a verandah, and a first floor containing two bed-rooms, a bath and w.c. room, a stairway hall and a verandah. There is one furnace-room and two fuel-rooms in the middle of the range to serve all the dwellings.

The basement floors and verandah floors are concrete and the division or party walls are of brick, but the remaining floors, partitions, stairways and roof are of wood.

Plans and specification prepared by this department.

Contractors, the J. McDiarmid Co.

STORE BUILDING.

Rifle racks and blinds were supplied, under the supervision of Jos. Greenfield, superintendent of public buildings, Manitoba, Winnipeg, Man.

BARRACKS.

Storm doors and a hood were provided for forge building, under the supervision of Jos. Greenfield, superintendent of public buildings, Manitoba, Winnipeg, Man.

WINNIPEG.

CUSTOM-HOUSE.

Alterations were effected to provide additional accommodation for Customs survey office; a new Customs express office was fitted up and the woodwork of the building was painted.

Work supervised by Jos. Greenfield, superintendent of public buildings, Winnipeg, Man.

EXAMINING WAREHOUSE.

The woodwork of the building was repainted, under the supervision of Jos. Greenfield, superintendent of public buildings, Winnipeg, Man.

NEW EXAMINING WAREHOUSE.

Plans and specification are prepared and tenders invited for the construction of this building which is to be four stories of brick and steel construction with stone dressings and on a stone basement. The floors and roof are of steel and concrete. The stairways are of iron throughout, excepting that the main stairway has marble treads in the lowest flight and slate treads above. There are four freight and one passenger elevators. The building is calculated to allow of two additional stories if required.

WINNIPEG—*Continued.*

The building measures 188 feet on McDiarmid street by a depth of 81 feet on Rorie street. On the left flank of the building is a one-story driveway measuring 37 feet on McDiarmid street by a depth of 81 feet.

Plans and specification prepared by this department.

IMMIGRATION BUILDING NO. 3.

The isolated ward was completed ,a circular iron stairway and a fire-escape were constructed therefor and new granolithic footpaths were laid. All under the supervision of Jos. Greenfield, superintendent of public buildings, Manitoba, Winnipeg, Man.

IMMIGRATION BUILDING NO. 4.

The plank floors were taken up and replaced by cement floors, troughs were fixed to all eaves, and electric fans were installed for the purpose of ventilation.

The building was completely overhauled and plastered and new granolithic footpaths were provided thereto, under the supervision of Jos. Greenfield, superintendent of public buildings, Manitoba, Winnipeg, Man.

POSTAL STATION 'B.'

On May 14, 1907 , a contract was entered into for the construction of this building on the corner of Main street and Magnus avenue. The building measures 67 by 81 feet. There are two stories of brick with stone dressings on a stone basement, and the ground floor of the two street fronts are faced with stone.

The outside entrance steps are of stone; the partitions of ground and first floors are of brick and the floor of basement is concrete; the remaining partitions and floors with the stairways and roof being wood. The outside cornice and frieze are covered with metal and the roof with tar and gravel. The building is entirely for postal purposes.

Plans, &c., prepared by this department.

Clerk of works, L. J. Jurkowski, architect.

Contractors, the J. McDiarmid Co.

NEW POST OFFICE.

The construction of this building, which was described in a previous report, is completed.

Plans prepared and work supervised by Darling and Pearson, architects, Toronto, Ont.

Contractors, Kelley Bros. Co.

Clerk of works, Robert Wilson.

PROVINCE OF SASKATCHEWAN.

MAPLE CREEK.

PUBLIC BUILDING.

On January 5, 1908, a contract was entered into for the construction of this building on a block of land extending 150 feet along Jasper street, 150 feet along an alley in rear, 130 feet along Front street, and 130 feet along an adjoining property.

It is a two-story brick building on a stone basement measuring 59 feet on Jasper street by 34 feet in depth.

MAPLE CREEK—*Continued.*

The basement is for heating apparatus, fuel and storage; the ground floor contains the post office and the examining warehouse, and the first floor, the Customs and Inland Revenue. There is a brick safe-room on each floor, the partitions of ground floor and basement are brick and of the first floor wood. The floors, excepting basement floor, which is concrete, together with the roof, the stairway and a number of the partitions, are of wood. The external cornice is of sheet metal.

Plans, specification, &c., prepared by the department.

Clerk of works, James Reid.

Contractors, Snyder Bros.

MEDICINE HAT.

PUBLIC BUILDING.

This building, which was described in a previous report, is still in progress.

Plans and specification prepared by this department.

Clerk of works, W. D. Williams.

Contractors, Oakes & Everard.

MOOSEJAW.

LAND OFFICE.

Office furniture was supplied for the post office inspector's office, under the supervision of W. T. Mollard, clerk of works, Regina, Sask.

REGINA.

DOMINION LANDS OFFICE.

A concrete footpath was laid from front entrance to street; the basement arrangement was altered, a w.c., sink, &c., put in, with all necessary plumbing, and some minor repairs were made to heating system.

Work supervised by W. T. Mollard, clerk of works, Regina, Sask.

IMMIGRATION HALL.

The interior was cleaned and tinted and there were some minor repairs effected. All under the supervision of W. T. Mollard, clerk of works, Regina, Sask.

POST OFFICE.

A number of post office fittings and furniture were supplied and some minor repairs made. All under the supervision of W. T. Mollard, clerk of works, Regina, Sask.

PUBLIC BUILDING.

This building, which was described in a previous report, is in process of construction.

Plans and specification prepared by this department.

Work supervised by W. T. Mollard, clerk of works, Regina, Sask.

SASKATOON.

PUBLIC BUILDING.

On June 21, 1907, a contract was entered into for the construction of this building on the corner of First avenue and Twenty-first street, upon which it has frontages of 84 feet and 72 feet respectively.

It is a two-story brick building with stone dressings on a concrete stone-faced basement. The partitions in basement and ground floor and a number of those in first floor are brick, and the floors and roof are of iron and concrete. The beams, columns and stairway are of iron. The external cornice, the frieze and also the pediments of entrance doors are wood, copper-covered. There are two brick safe-rooms on each floor.

The basement is for the heating apparatus, fuel and stores; the ground floor contains the post office, weights and measures and examining warehouse; the first floor containing the Customs and Inland Revenue offices, postmaster's office and separate w.c. rooms for men and women.

Plans, &c., prepared by this department.

Clerk of works, Neil Stewart.

Contractors, the J. McDiarmid Co.

IMMIGRATION HALL.

An office was partitioned off for the agent, and furniture and a stove therefor provided. All under the supervision of W. T. Mollard, clerk of works, Regina, Sask.

PROVINCE OF ALBERTA.

CALGARY.

ADDITIONS TO POST OFFICE BUILDING.

This building, which was described in a previous report, has since been completed.

EDMONTON.

PUBLIC BUILDING.

This building, which was described in my report of last year, is still in progress. Plans and specification for heating, lighting, elevator and fittings for offices are prepared.

Clerk of works, H. J. Manson.

Contractors, The May-Sharpe Construction Company.

MEDICINE HAT.

ONE TROOP ARMOURY.

A contract for the construction of this armoury which is designed for two squadrons of cavalry, was entered into on November 5, 1907.

It is a two-story brick building on a concrete stone-faced basement, measuring 47 by 49 feet, the basement being only in part excavated.

MEDICINE HAT—*Continued.*

On the ground floor are two rooms for squadron C. O., a hall, a cleaning room, two clothes rooms, two cleaning rooms and a water-closet room; on the first floor are a lecture room, a troop C. O. room and a clerk's room.

Plans, &c., prepared by this department.

Clerk of works, W. T. Williams, architect.

Contractor, A. P. Burns.

PROVINCE OF BRITISH COLUMBIA.

CUMBERLAND.

PUBLIC BUILDING.

On November 25, 1907, a contract was entered into for the construction of this building, which is to have a frontage on Dunsmuir avenue of 44 feet by a depth of 44 feet; the site having frontages of 60 feet, 120 feet and 60 feet on Dunsmuir avenue, Third street and lane in rear respectively.

It is a two-story brick building with stone dressings and stone entrance steps and on a stone basement. The roof cornice is of wood, metal covered, and the floors, partitions, stairs and roof are of wood, excepting that the basement, partitions and piers are of brick. There is a brick vault on both ground and first floors.

The basement is divided into furnace room, fuel room and store room; the ground floor is the post office, and on the first floor are the Customs office, w.c. rooms, &c.

Drainage is to a cesspool in yard.

Plans and specification prepared by this department.

Clerk of works, James Stewart.

Contractor, Edward Hunt.

FERNIE.

PUBLIC BUILDING.

A contract for the construction of this building, which was described in my report of last year, was entered into on April 9, 1907, and the works are still in progress.

Plans for heating, lighting, post office fittings, &c., are prepared.

Plans, &c., prepared by this department.

Clerk of works, Robert A. Kerr.

Contractors, J. G. and M. MacCallum.

KAMLOOPS.

PUBLIC BUILDING.

A fire-escape was fixed to the building; general and ordinary repairs were made throughout the building, and furniture and fittings supplied to the Crown Timber office, as well as a number of articles to the other offices. All under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

LADYSMITH.

PUBLIC BUILDING.

A contract was entered into on February 3, 1908, for the construction of this building on a plot of ground fronting on Esplanade street, having a lane in the rear, flanked on the left by Roberts street and on the right by adjoining property.

The building is to be two stories high, built of brick, on a concrete stone-faced basement and measuring on plan 60 feet by 34 feet. The partitions on ground and basement floors are to be of brick and on first floor wood. Excepting the basement floor, which is floored in concrete, the floors, stairs and roofs are to be of wood. There is to be a concrete platform in basement and a brick safe-room on both ground and first floors. The entrance steps are to be cut stone, and the platform at the examining warehouse entrance, concrete. The external walls frieze and cornice are to be sheet metal.

The basement is intended for the heating apparatus and fuel; the ground floor for the post office, examining warehouse and stairway vestibule, while the first floor will contain the Customs office and caretaker's apartments. There are to be, on the first floor a combined lavatory and water-closet room for the officials and a combined bath and water-closet room for the caretaker.

Drainage is to a cesspool in the rear of the lot.

Plans and specification prepared by this department.

Clerk of works, E. Rowlands.

Contractors, Parfitt Bros.

NANAIMO.

PUBLIC BUILDING.

There were supplied two desks, one chair, one lavatory basin, one furnace door, sliding partitions, cash drawers, portable and opal lamps, prism and plate glass and door checks, and repairs were made to lighting, water service and galvanized hips and ridges. All under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

NEW WESTMINSTER.

INDIAN AFFAIRS AND FISHERIES OFFICE BUILDING.

A concrete retaining wall, with wrought iron fence and gates, were erected and the grounds were graded and sodded, under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

PUBLIC BUILDING.

The street letter boxes were painted and varnished; the area formerly used by the Fisheries Department was taken into the post office area, and the lobby screen was altered and enlarged, and the lighting, &c., altered as required; a cupboard was supplied Public Works office, and repairs were made to plumbing, grate bars, gas piping and drain, all under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

ROSSLAND.

PUBLIC BUILDING.

A new rug, some furnace grates and some new dry batteries were supplied, and repairs were made to plumbing, locks, springs, heating furnace, clock, doors and roof.

Work supervised by Wm. Henderson, resident architect, Victoria, B.C.

VANCOUVER.

POST OFFICE.

This building, which was described in my report of last year, has been in process of construction since.

Tenders are invited for the construction of a hot water heating system.

Plans and specification prepared by this department.

Clerk of works, Chas. Tossell.

Contractors, Kelly Bros. & Mitchell, Ltd.

PUBLIC BUILDING.

The dead letter office was moved and fitted up in new quarters; changes and alterations were made in the money order office, parcel delivery and registry office; the customs express new quarters were fitted up and cleaned, and the bells repaired; the parcels express office was refloored and supplied with a stove, and the postal parcels office with shelving, blinds, &c.; the street letter boxes were painted and varnished; electric lighting was installed in the appraiser's office, express offices and long room, and new lights as well as switches were supplied and many altered, in every department of the building; a desk, three chairs and some bracket lights were supplied the warehouse; a fireproof safe, a stamping machine, signs, counters, fittings and furniture, dry batteries, blackboard, pigeon-hole cases, hook racks, cabinets, stools, locks, sorting racks, stepladders, bag hooks, letter cases, stove, trays, desks, chairs, curtains, lumber, plate glass, &c., were supplied to the post office. The customs were supplied with one new filing cabinet, one new coil, also pigeon holes, shelving, bookcase, wire grilles; a new urinal tank was fitted up and a grate and grate rest supplied.

Repairs were made to slate roof, lead valleys, ridge rolls, flashings, copings, gutters, doors, windows, floors, plastering, painting and glazing, locks, clocks, stamping and cancelling machines, bells, plumbing, fittings and furniture, and the heating plant was renovated.

Work supervised by Wm. Henderson, resident architect, Victoria, B.C.

IMMIGRATION SHED ON C.P.R. WHARF.

Five hundred feet of gas piping was laid to install gas lighting. Under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

VICTORIA.

IMMIGRATION HOSPITAL.

On January 23, 1908, a contract was entered into for the construction of this building on a plot of ground consisting of government lots 1431, 1432, 1433, 1448, 1449, 1450. The building is to have a frontage of 98 feet on Ontario street by a depth of 35 feet and extend along Dallas street 91 feet by a depth of 45 feet.

It is to have two stories and basement, with verandahs, 10 feet in width on both stories extending along both sides of the reentrant angle in rear. The verandahs are carried out as covered passages on all floors to a two-story and basement outlying building measuring 16 feet by 21 feet on plan in rear. The walls of the building and the outlier are of brick on concrete foundations, the basement above ground being faced with stone. The verandahs are of iron and concrete.

The basement extends only under 53 feet of the length of the right wing of the Ontario street front, and is 34 feet in depth; it contains boiler room, laundry, fuel room, storage and under the outlier, bath rooms, water-closet rooms and lavatory rooms. On the ground floor the main building contains a general waiting room, a

VICTORIA—*Continued.*

general dining room, a kitchen, a guards' dining room, a detention room, two rooms for guards, two rooms for medical officers, two rooms for U.S. officers, two rooms for clerks, one spare room, and also water-closet and lavataory room, bath room, vestibules, corridors and stairways; in the ground floor of the outlier a two tub laundry and two water-closet and lavatory rooms. On the first floor, the main building, contains six wards, a surgery, a medical officers' room, a nurses' room, a guards' room, a detention room, two store rooms, four bath and water-closet rooms, one night water-closet and lavatory rooms, one water-closet room, and in the outlier three water-closet and lavatory rooms.

Plans, &c., prepared by this department.

Clerk of works, Geo. Glover.

Contractors, Lemey Bros.

MARINE HOSPITAL.

Repairs were made to plumbing, under the supervision of Wm. Henderson, resident architect.

OLD POST OFFICE BUILDING.

The plumbing, glazing and roof were repaired and new rain water conductor pipes supplied and fixed. All under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

PUBLIC BUILDING.

In the post office portion the space over stairway hall was floored and the room formed is occupied as a newspaper and parcel room; the south entrance to building was closed; the offices of Inspector of Customs, Surveyor of Customs and gaugers had the walls and ceilings cleaned and tinted and the woodwork painted or varnished; an office was entirely fitted up and furnished for the Inland Revenue Department; furniture was supplied to the Inland Revenue, Savings Bank, Public Works and Customs Departments; the street letter boxes were painted and varnished; a sealing wax heater was supplied and installed, as also a stamping machine and motor; a new cast-iron sewer pipe, outside building, was laid in place of the original fire-clay sewer pipe; alterations and repairs were effected in caretaker's quarters to afford increased accommodation; the courtyard was laid in rough stone sets; a switch was installed in furnace-room; wiring was installed for new telegraph office; renewals of motor parts and other portions of elevator and machinery were made; new gates were supplied to boiler and repairs were made to elevators, woodwork, lighting, plastering, cement work, painting, glazing, heating, plumbing, bells, &c.

Work supervised by Wm. Henderson, resident architect, Victoria, B.C.

CATTLE QUARANTINE CORRAL.

Repairs to gates and fences were effected, under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

WILLIAM HEAD.

QUARANTINE STATION.

The walls, ceilings and floor of detention building were painted, and repairs were made to plumbing, boilers, roofs, drains, carpentry, fences, woodwork, gutters, footpaths and sheet metal work. All supervised by Wm. Henderson, resident architect, Victoria, B.C.

WILLIAM HEAD—*Continued.*

LEPER STATION, DARCY ISLAND.

Two concrete cottages for lepers and one concrete and frame residence for caretaker were erected, under the supervision of Wm. Henderson, resident architect, Victoria, B.C.

YUKON TERRITORY.

DAWSON.

GOVERNMENT HOUSE.

The damage resulting to this building its furniture, &c., by fire on December 25, 1906, was made good, the plumbing was added to and the building and grounds maintained by the department, under the supervision of S. A. Bertrand, superintendent of public buildings, Yukon Territory.

BUILDINGS GENERALLY.

General repairs and maintenance of the various public buildings throughout the territory were effected, under the supervision of S. A. Bertrand, superintendent of public buildings, Yukon Territory.

LIST OF YUKON PUBLIC BUILDINGS.

Dawson, Administration Building.
" Government House.
" Post Office.
" Court House.
" Government Warehouse.
Glacier Creek, Mining Records Office.
Duncan, Mining Records Office.
Conrad and Carcross, Mining Records Office.
Kluhane, Mining Records Office.

PART IV

CHIEF ENGINEER'S REPORT

ON

HARBOUR AND RIVER WORKS

INCLUSIVE OF

GRAVING DOCKS AND DREDGING OPERATIONS

ALSO

ROADS, BRIDGES AND SURVEYS THROUGHOUT THE DOMINION.

REPORT OF THE CHIEF ENGINEER.

DEPARTMENT OF PUBLIC WORKS OF CANADA,
CHIEF ENGINEER'S OFFICE,
OTTAWA, November 4, 1908.

NAPOLEON TESSIER, Esq.,
Secretary,
Department of Public Works.

SIR,—I have the honour to submit the annual report on the various works under my charge during the fiscal year ended March 31, 1908.

These works comprise the construction and repair of wharfs, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, maintenance and operation of government dredging plant; the construction and maintenance of graving docks; the construction, maintenance and working of slides and booms; the construction and maintenance of interprovincial bridges and approaches thereto, and of bridges on highways of federal importance in the Northwest Territories and the maintenance of military roads; also hydrographic and ordinary surveys and examinations, inclusive of precision levelling and geodetic measurements which are required for the preparation of plans, reports and estimates; the testing of cements, &c.

I have the honour to be, sir,
Your obedient servant,

EUG. D. LAFLEUR,
Chief Engineer.

PROVINCE OF NOVA SCOTIA.

AMAGUADEES.

Amaguadees Pond, Cape Breton county, is on the northern side of East bay, the eastern arm of the great Bras d'Or lake, about three miles from Benacadie Point at the entrance to and 16 miles from the head of the bay.

It is a large sheet of water, about one mile in length and a quarter of a mile in width, with a considerable depth of water, separated from the bay by a beach of gravel, overlying clay, from 100 to 200 feet in width, and about four feet high above the summer level of the lake. The outlet is at the eastern end of the beach, but as it was only open for short periods after freshets, and then only available to small boats, the pond was not of any practical benefit to the inhabitants.

During 1902-3-4, the sum of $3,980.52 was expended in the construction of a block and span wharf on the outside of the beach, at a point about 600 feet from its eastern end. The work extends to 11 feet at low lake level, and is 128 feet in length and 20 feet wide, with an 'L' on the eastern side of its outer end, 20 by 20 feet. The blocks are constructed with round timber, creosoted to high lake level, and the outer block is protected by close-sheathing.

After the construction of the wharf, the outlet of the pond, which formerly was only open at times, not only remained open, but it widened and deepened to such an extent as to interfere with the traffic to and from the wharf.

During 1905-6-7, the sum of $750 was expended in constructing a bridge across the inlet, 100 feet in length and 16 feet wide, and consisting of approaches, built of brush and stone, 30 feet and 22 feet in length, with cribwork blocks at their outer ends, 12 feet long, and of a span between them, 24 feet long. The approaches were covered with clay; the cribwork abutments and the span were planked over.

For the storing of goods to be shipped and landed by the steamer *Blue Hill,* which calls here fortnightly, during the season, and makes connections with the I.C.R. at Grand Narrows, during the year ended March 31, 1908, the sum of $149.88 was expended in the construction of a small warehouse on the outer end of the wharf.

AMHERST POINT.

Amherst Point is a farming settlement, of some 400 people, situated about three miles south of Amherst town. In order that the farmers might be able to ship their produce, the department, in the fiscal year 1905-6, began the construction of a wharf at this place. During that fiscal year an additional sum of $3,784.93 was expended on this work, and during the past fiscal year the sum of $3,656.03 was expended in completing this work. It was completed about the last of October, 1907.

This wharf consists of two portions, an approach and a continuous cribwork blocking.

The approach is 600 feet long, 16 feet wide, and has an average height of 7 feet. It is constructed of rough, round-log cribwork, close-faced and filled with mud, excavated from the adjoining marsh lands.

The continuous cribwork block is constructed of round, long, close-faced stone-filled cribwork, well fastened and fendered. It is 155 feet long, with a width of 20 feet on top, with the exception of the last 30 feet, which has a width of 40 feet on top. Its height at the outer end is 29 feet, and in order to obtain satisfactory accommodations, we excavated the entire surface of the bottom to a depth of 5 feet, and built up the cribwork on a foundation of mattresses of brush and stone, with which this excavation was filled.

Spring tides rise here 40 feet, neaps 33 feet.

ANNAPOLIS ROYAL.

Annapolis Royal, Annapolis county, is the oldest town in the province of Nova Scotia, having been founded in 1605. It is beautifully situated at the head of Annapolis basin and on the south side of Annapolis river. It has a population of about 2,000 people and is the centre of one of the most fertile districts in Nova Scotia. On the water front of the town there has not been, for many years, a public wharf or landing place. The Queen's wharf, so-called, at the east end of the town, is supposed to have been first constructed during the French occupation in the 17th century. In or about 1868 it was repaired and extended and made serviceable for the accommodation of the steamer which plied between Annapolis, Digby and St. John, N.B., before the construction of the railway from Annapolis to Yarmouth. Both the original construction and the extension were in cribwork.

The wharf being for a great many years a complete wreck, and to a certain extent a danger to navigation, the department in 1905-6, expended the sum of $3,885.75 in partly building a new structure on the site of the old one.

In 1906-7, $4,098.95 was expended, but the work was not quite completed. It consists of an approach of earth and stone, walled on each side, 250 feet long, 30 feet wide and of an average height of 8 feet. This approach is followed by a pile-work structure 240 feet long by 30 feet wide, with a 'T' on the outer end, 90 feet long on the face by 40 feet wide. The piles in the 'T' are creosoted. Along the face the work is about 36 feet high, with 32 feet of water at H.W.O.S.T., and about 7 feet at low water. On the north side of the stem, next to the 'T,' is a flight of steps and a level platform or landing for the accommodation of boats and small craft, and in the middle of the face of the work a lifting slip operated by a powerful double hand-winch, for the convenience of steamers.

In 1907-8 the sum of $1,381.77 was expended in completing the work.

Spring tides rise 29 feet, neaps 23 feet.

ARISAIG.

Arisaig, Antigonish county, is on the south-eastern shore of Northumberland Strait, about 15 miles south-east from Cape George.

The works at this place include a pier on the northern and a breakwater on the southern side of the cove.

The breakwater, constructed during 1887-8, was 380 feet in length, extending to 5 feet at low water, and 20 feet wide, with an 'L' on the south-western side of the outer end, 40 feet long and 20 feet wide; with the exception of 80 feet at the inner end, which is of stone, it is constructed of close-faced native timber cribwork, fully ballasted; the outer 50 feet and the 'L' were protected by close-sheathing.

From natural decay the top of the breakwater became weakened, and the outer end with the 'L,' has been destroyed by the teredo.

The sum of $2,200 was appropriated, during 1905-6, for reconstructing the top of the outer end of the approach, for a distance of 50 feet, and for the construction of a creosoted timber block 28 by 30 feet at its outer end, but owing to the non-delivery of the creosoted timber required, out of the amount voted the sum of $1,263.52 only was expended, and that was for the reconstruction of the outer 50 feet of the old top of the approach, and for procuring the native timber required for the top of the proposed outer block.

The sum of $1,500 was voted for expenditure during 1906-7 to complete the outer block, but again owing to the non-delivery of the creosoted timber required, the sum of $280.27 only was expended for the ballast needed for the block, and a further sum of $218.96 was expended on urgent repairs to the seaward face of the 'L,' consisting in the renewal of sheathing, ballast and some covering on the northern side of the pier.

Out of the amount voted for expenditure during 1907-8 for reconstruction of the outer end of the breakwater (which had been destroyed by the ravages of the teredo), the sum of $835.07 was expended for the creosoted timber required, and the sum of $224.15 on urgent repairs to the outer end of the pier.

AVONPORT.

Avonport, King's county, is a small farming village with a population of about 250 people, situated at the mouth of the Avon river (at this point nearly two miles wide) and on the Dominion Atlantic Railway, 12 miles northwest from Windsor, the county town of Hants ,and 13 miles east from Kentville, the county town of Kings. Some two or three millions of bricks are made here during the year.

A small wharf of ordinary round-log stone filled cribwork was built before confederation by the inhabitants, aided by the provincial government. It is 300 feet long, 22 feet to 25 feet wide on top, and 17 feet high at the outer end, which is dry at L.W.O.S.T.

In 1886, the department, having assumed control of the wharf some little time previously, spent $1,200 in extensive general repairs.

In 1896-7, 1900-1 and 1906-7, the structure was also repaired and improved.

In 1907-8, the sum of $49.89 was expended in widening and strengthening about 50 feet in length of the approach to the wharf, which was not completed the year previous.

BADDECK.

Baddeck, the shiretown of the county of Victoria, is on the northern shore of the Little Bras d'Or lake, near the entrance into St. Patrick's channel.

On March 2, 1907, a contract, in the sum of $10,690 was entered into for the construction of a public wharf. The work of construction was commenced on December 23.

The work is 284 feet in length and extends to 18 feet at low water; it includes a road approach with stone retaining wall at the side, 64 feet long and 40 feet wide; cribwork with creosoted timber substructure, 50 feet long and 48 feet wide, and a creosoted timber pile extension, 170 feet long and 40 feet wide.

In addition to the construction of the wharf, an agreement was entered into with the contractor for the construction of two boat landing stages, respectively 32 and 64 feet in length and both 8 feet wide, built on a creosoted timber pile foundation; this extra work, which cost $415, was also completed December 23, 1907.

Total expenditure during fiscal year ended March 31, 1908, $11,709.33.

BADDECK RIVER.

The Baddeck river is a large stream in Victoria county, flowing through a rich agricultural district and emptying into the St. Patrick's channel, an arm of the Bras d'Or lakes, at a point about five miles to the westward of the town of Baddeck.

The sum of $1,500 was voted for expenditure during 1907-8, for the improvement of the river at a point about five miles from its mouth.

As the appropriation was made without any official knowledge as to requirements, an examination of the river at that point had to be made to ascertain what was to be done with the amount available, and it was decided, in order to prevent further damages by the river during the freshets, to divert the course of the river into an old and straighter channel.

It was proposed to construct a shear-dam, 250 feet long and 15 feet wide, consisting of piles, brush and stone, close-sheathed on the channel face, but owing to delay in commencing the work, and to frequent freshets during the progress of the work, only 150 feet of the proposed improvement could be accomplished during the season, and out of the amount voted, the sum of $1,090.47 only was expended

BARACHOIS.

Barachois, Victoria county, is a settlement at the mouth of Barachois river, on the northern side of St. Ann's bay, about three miles from the entrance into St. Ann's harbour. It has a snug little harbour, formed by an outlying beach, and connected, at its southern end, with the bay by a shifting channel through the gravel beach.

During 1904-5-6 a breakwater, 232 feet in length and 15 feet wide, was constructed on the eastern side of the entrance to arrest the movement of the gravel from the northward and to prevent the blocking of the channel; its total cost amounted to $2,901.46.

The sum of $1,600 was voted for expenditure during 1907-8 on the construction of a training pier, 230 feet long and 15 feet wide, consisting of pile, brush and stone-

work, on the western side of the entrance, for the purpose of confining the channel and secure a greater depth of water in it.

Out of the amount voted, up to the end of March, 1908, the sum of $805.46 was expended in procuring all the materials required for the construction of the proposed work.

BARRINGTON PASSAGE.

Four hundred dollars were expended in extending a freight shed and in placing about 20 additional braces and 25 pieces of timber on the top of the work. This part of the work was satisfactorily performed.

BAYFIELD.

Bayfield, Antigonish county, is on the southern shore of St. George's bay, 15 miles westward on the northern entrance to the Strait of Canso.

There are two works at this place; a wharf 442 feet in length, built in 1892-4, and a breakwater (cribwork core and stone embankment), 760 feet in length, commenced in 1879 and completed in 1888.

Repairs and improvements to the breakwater, including the construction of a concrete wall, 525 feet in length over the inner face of the cribwork core (150 to 675 feet from the inner end), and the reconstruction of the stone covering on each side of the wall, undertaken in 1903-4, were completed in 1904-5 and 1905-6.

In 1906-7, the sum of $1,799.73 was expended in extending the concrete wall 70 feet and in reconstructing and grouting with concrete, the covering of the talus on the northern side of the concrete wall, 150 to 675 feet from the inner end, which had been damaged after completion of repairs in 1905-6, and on the northern side of the extension.

During the fiscal year 1907-8, the sum of $1,799.47 was expended in constructing a 40-foot extension of the concrete wall with outer end or 'head' 10 feet in line of work by 14 feet, founded 1½ feet below low water and built up 5½ feet to high water level; in grouting the covering on each side of the extension, and in extending the concrete wall from the inner end inwards 20 feet. From the 'head' inwards, the 40-foot extension of the concrete wall is stopped up to 5 feet above high water or to the level of the top of concrete wall, previously constructed.

BAY ST. LAWRENCE.

Bay St. Lawrence, Victoria county, is on the northern extremity of the island of Cape Breton, and lies between Cape North and Black Point

At the head of the bay and separated from it by a beach of sand, gravel and stone, there is a small lake or pond, about three-quarters of a mile in length and half a mile in width, with a considerable depth of water.

In 1887, a channel, to low water, was opened by the department through the beach into the pond, but not being protected from the sea, it was filled in again by sand.

During 1888-9 the channel, which had been alternately opened by freshets and closed during northerly gales, was reopened and protected on its western side by a cribwork block, 53 feet in length, beyond high water mark, and by a work of brush and stone, 30 feet in length, from high water mark inwards. The channel remained open for a short time after the completion of the protection work, but it was closed again by sand, at the inner end, during a northwesterly gale. The cribwork block still remains, but the brush and stonework, after having been damaged, was washed out by the sea.

The sum of $5,500 was voted for expenditure during 1905-6 towards the formation of a boat harbour, and, on November 25, 1905, a plan and specification for the

works required to make a permanent channel through the beach and to render the pond accessible to fishing boats at all times of tide, were submitted for approval.

Tenders for the construction of the works required were called in July, 1907, and a contract in the sum of $24,550 was entered into, on September 11, with Mr. Hugh McDonald, for their execution.

The works under contract include the excavation of a channel through the beach, cut to two feet below low water and 50 feet wide at the bottom, and the construction of channel protection piers on each side of the channel, 290 feet in length and extending outwards into eight feet at low water. The inner ends of the works, for a distance of 150 feet, are to be 15 feet wide and to consist of native round timber cribwork; the middle sections, 100 feet in length, will be 20 feet wide and constructed of round timber, creosoted to half tide, and the outer sections, or heads, 40 feet long and 30 feet wide, and constructed with squared timber, laid open-faced and creosoted to half tide. The whole of the cribwork is to be filled in solidly with ballast, and the middle and outer sections are to be close-sheathed on all outer faces.

Up to the end of the fiscal year, the work of construction had not been commenced, but the necessary materials were being procured.

Expenditure during fiscal year 1907-8 for preparation of plans, calling of tenders, &c., $183.

BEAR RIVER.

Bear River, Annapolis county, is situated at the head of navigation, five miles above the two bridges, highway and railway, which are near the mouth of the river.

It is a prosperous village of about 1,000 people, partly in Annapolis and partly in Digby counties, the river forming the boundary line between the two counties. Large quantities of piles, cordwood and lumber are annually shipped to South America, the West Indies and the United States.

In 1901-2, the sum of $3,000 was expended:—

(*a*) In removing the upper portion of an old pier of the highway bridge, which was rebuilt by the provincial government about twelve years ago, on a site about 100 feet farther up stream.

(*b* In rebuilding in substantial pile-work, the dropping pier on the down-stream side of the swing span of the highway bridge.

In 1902-3, the sum of $1,611.35 was expended in rebuilding the dropping pier on the up-stream side of the Victoria highway bridge.

In 1905-6, the sum of $584.86 was expended in the purchase of materials for the purpose of rebuilding, in cribwork, the upper end of the dropping pier, which was severely injured by the heavy ice of the exceptionally severe winter of 1904-5.

In 1906-7, the sum of $338.35 was expended in beginning the construction of the new block.

In 1907-8,the sum of $966.50 was expended in completing the work, which consists of a substantial block of cribwork 30 feet long, 22 to 25 feet wide, and from 33 to 35 feet high.

Spring tide rises about 25 feet.

BEAR TRAP.

Bear Trap harbour, Lunenburg county, is situated on the southeast coast of Lunenburg county, about midway between the towns of Liverpool and Lunenburg, or a distance of sixteen miles from each and half a mile northeast from the entrance of Broad Cove.

It is not a harbour, properly speaking, as it is fully open to the sea, but merely a small indentation in the coast line not more than 600 feet deep.

It is inhabited only during the fishing season by fishermen from Broad Cove.

In 1885 the department expended the sum of $200 in digging a channel (175 feet long, 10 feet wide, and having a depth of 5¾ at H.W.O.S.T.) from the head of the little cove to the pond on the upper side of the road, to enable the fishermen to enter the latter with their boats, and there find shelter from south and east gales.

In 1894-5, the sum of $40 was expended in reopening the channel that had been filled with sand and gravel, washed in by the waves.

In 1907-8, the department expended the sum of $837.34 in reopening the boat channel, first made in 1885, and in building two small blocks of cribwork to protect its mouth. The blocks are respectively 50 feet and 72 feet long, each 12 feet wide and about 7 feet high at their outer ends.

BECKERTON.

Beckerton, or Port Beckerton, Guysborough county, is a harbour on the southern or Atlantic coast of Nova Scotia, about midway between Indian Bay and Country Harbour and about five and a half miles distant from the entrance of each.

The wharf at this place, undertaken in 1904-5 and completed in 1905-6, is a block and span structure, of native timber, extending 190 feet to 12 feet at low water.

During the fiscal year 1907-8 the sum of $8 was expended in placing an additional wire in the fence constructed, in 1905-6, on the western side of the road leading from the highway to the public wharf.

BIG BRAS D'OR.

Big Bras d'Or, Victoria county, is a settlement on the south side of the channel of the same name, near its entrance into the Atlantic.

The wharf, completed during 1888-9, is a block and span structure, 150 feet long and 20 feet wide, with an 'L' on the eastern side of the outer end, 40 by 20 feet, constructed entirely of native timber, and with a depth of 11 feet at low water along its channel face.

During 1900-1-2, the close-piling around the outer block, which had been completely destroyed by the teredo, below the line of low water, and portions of the covering and the cap-timbers, which were worn and decayed, were renewed.

During the fiscal year ended March 31, 1908, the sum of $48.07 was expended in temporary repairs to the top of the wharf, which was in a dangerous condition.

BLUE ROCK.

Blue Rock, Antigonish county, is situated on the southern coast of St. George's bay, about two and one-half miles to the eastward of the entrance into Tracadie harbour, and six miles to the westward of the northern entrance into the Strait of Canso.

A breakwater extending 316 feet in a southwesterly direction from Blue Cape for the protection of a boat landing and to afford shelter for fishing boats, was commenced by the department in 1886 and completed in 1889. It is from 16½ to 17 feet in width on top, with a face on the seaward side sloping 1 to 1 from the top of the work to 1 foot above high water. The depth at the outer end, at extreme low water, is 12 feet, and, over the area sheltered from the north and east, from 11 to 5 feet. Spring tides rise 4 feet.

Repairs and improvements were made in 1893-4-5 and 1899-1900-1, including close-fendering the outer end and the sloping face, reconstructing the top work over a distance of 60 feet from the outer end inwards, and placing a stone talus on the seaward side, at the outer end, and on the inner side for a distance of 40 feet from the outer end inwards.

During the fiscal period of nine months ended March 31, 1907, the sum of $497.61 was expended in renewing the top work of the breakwater over 80 feet, from 60 feet from the inner end outwards, and in placing stone in the talus on the seaward side.

During the year 1907-8 the sum of $199.88 was expended in the renewal of some close-sheathing on the seaward face and end, and in replacing some covering on the top and some stone in the talus.

BOISDALE.

Boisdale, Cape Breton, is a station on the Intercolonial Railway, on the south-eastern side of St. Andrew's channel, an arm of the Little Bras d'Or lake, about 15 miles northeast of Grand Narrows.

A contract was entered into, in March, 1906, for the construction of a block and span wharf, extending to 11 feet at low lake level, for the sum of $4,995.

The work of construction was commenced during 1906-7, but, owing to the late delivery of the creosoted timber required, it could not be completed during that year.

The creosoted timber was delivered in May, 1907, the work of construction was at once resumed, and it was completed on July 23.

The wharf is 187 feet long; it consists of a shore abutment 9 feet long and 20 feet wide; of four cribwork blocks, 17 by 20 feet; and of an outer block 20 by 40 feet, on top, with openings between them 18 feet in length. The abutment and the blocks are constructed of round timber, with creosoted timber substructure, sloping 1 in 12 on all sides, and the outer faces of the outer blocks are close-sheathed, between the fenders, with 4-inch plank, creosoted in the substructure and of hardwood in the superstructure.

Expenditure during fiscal year 1907-8, $4,140.

BOURGEOISE INLET.

Bourgeoise Inlet, Richmond county, commonly called River Bourgeoise, is on the northern side of the eastern entrance to Lennox Passage (a strait connecting St. Peter's bay with the Strait of Canso), and about four miles to the westward of St. Peter's canal, at the head of St. Peter's bay. It extends inland three-quarters of a mile, and then branches east and west. The depth at low water, at the entrance, is 12 feet, and over the greater part of the area inside from 12 to 18 feet. Spring tides rise 5½ feet.

In 1905-6 a wharf, on the northern side of the inlet, known as 'Boyd's wharf,' was purchased by the department.

During the fiscal period of nine months ended March 31, 1907, the sum of $814.53 was expended in procuring all the materials required for the reconstructing and extending the wharf a distance of 24 feet, with the exception of the creosoted timber for side-piling the old work, and for piling in the extension, and in nearly completing the reconstruction of the old work.

During 1907-8, the sum of $656.76 was expended in procuring the creosoted timber required and in completing the reconstruction of the old work and the construction of the extension.

The work as completed is 108 feet in length on the centre line and 49 feet wide; the inner 84 feet, consisting of native timber cribwork, filled with stone and covered with gravel, and the outer 24 feet, of creosoted timber pile-work, covered with plank.

BRETON COVE.

Breton Cove, Victoria county, is on the northeastern shore of the island of Cape Breton, about midway between St. Ann's harbour and South Ingonish bay.

During 1904-5, a wharf was constructed to serve the purpose of a boat landing and to afford shelter for fishing boats. It is a continuous cribwork structure, with creo-

soted timber substructure, extending to 4 feet at low water, 195 feet in length and 16 feet wide, with an 'L' on the western side of the outer end, 24 by 20 feet.

As it was found that the gravel and shingle, composing the beaches to the northeastward of the work, was making up along its eastern face and threatened to go around its outer end, it was decided to extend the work, and on October 28, 1907, a contract in the sum of $5,788 was entered into for that purpose.

The work under contract is 120 feet long and 16 feet wide, with an 'L' on the western side of the outer end, 24 by 20 feet, and is to consist of round timber cribwork, creosoted to half tide.

Up to the end of the fiscal year, the work had not been commenced, but the necessary materials were being procured.

Expenditure during fiscal year 1907-8 for preparation of plans, calling of tenders, &c., $136.27.

BROAD COVE MARSH.

Broad Cove Marsh, Inverness county, is on the Gulf of St. Lawrence, 12 miles south from Margaree harbour.

The wharf at this place, on its completion in 1888, extended 400 feet to 12 feet 10 inches at extreme low water. It was badly damaged in 1894 and was subsequently carried away to within 207 feet of the inner end. In 1894-5-6, the inner 207 feet was repaired and strengthened, and in 1897-8 ,a small amount was expended in repairs.

When repairs were undertaken in 1904-5, only 100 feet of the work remained. During the years 1904-5-6, an extension, 123 feet in length, was constructed, and close-sheathed, between fenders, on each side and at the outer end.

During the fiscal year 1907-8, the sum of $409.60 was expended in renewing the floor stringers, covering and cap timbers of the inner 100 feet of the wharf.

The depth at extreme low water, at the outer end of the 123 foot extension, is 7 feet. Spring tides raise 4½ feet.

CANNING.

Canning, King's county, is a prosperous village of about 1,500 people, mostly engaged in farming and fruit raising; it is situated on the north or left bank of the Habitant river, which, about two and a half miles below, debouches into the Basin of Minas. It is an important station of the Kingsport branch of the Dominion Atlantic Railway, which connects with the main line at Kentville, eleven miles to the south.

In 1904-5, the sum of $891.27 was expended in the purchase of timber for the construction of a cribwork wharf.

In 1905-6, the sum of $14,137.08 was expended in the construction of a wharf. It consists of a piece of cribwork, 260 feet long with an ell or return, 90 feet long, 28 feet high and 22 feet wide on top. The back batters 3 inches to 1 foot and the front 1 inch to the foot. The whole block is founded on piles, driven to rock, and cut off level with the mud. The excavation of the berth in front, and the filling up of the space behind the wharf were not completed at the end of the fiscal year.

In 1906-7, the sum of $8,640.59 was expended in continuing the work.

In 1907-8, the sum of $3,996.55 was expended in completing the wharf and the filling in its rear, and in building a trestle approach to the wharf, 240 feet long by 20 feet high.

Spring tides rise over 40 feet.

CAPE AUGET.

Cape Auget, Richmond county, is on the southern promontary of Madame island, which separates the harbour of Arichat from Petit de Grât inlet, and forms the southeastern side of Arichat harbour.

During 1901-2, a small breakwater, 50 feet in length and 16 feet wide, extending to low water, was constructed on the western side of the entrance to Herbine's Cove, a small boat harbour on the northwestern side of the cape, about one mile to the eastward of Point Marache, which is on the eastern side of the southern entrance to Arichat harbour.

During 1902-3, the breakwater was extended by the addition of a block, 40 feet long, 20 feet wide, and to 9 feet at low water.

The work having proved very beneficial to the fishermen of the district, in the protection of their boats, their number was increased by outsiders, until it was found necessary to enlarge the protected area by a further extension of 40 feet to the breakwater.

Of the amount voted for expenditure during 1907-8, on the construction of the 40-feet extension, viz., $2,000, the sum of $1,853.60 was expended upon it. Owing to the presence of snow and ice, the work could not be fully completed by the end of the fiscal year. The floor-stringers, the covering, the cap and a few fenders remain yet to be placed and secured.

CHARLO'S COVE.

Charlo's Cove, Guysborough county, is on the northern shore of Tor bay, on the Atlantic coast of Nova Scotia, to the westward of Whitehaven.

On October 27, 1906, a contract was entered into for the construction of a breakwater on the northern side of the entrance to the cove, for the sum of $12,875.

The work was commenced on July 12, 1907, and was completed on December 20.

The breakwater is 484 feet in length, 16 feet wide on top, and extends to 4½ feet at extreme low water. It consists of round native timber cribwork, fully ballasted, and protected on the seaward side by close-fendering and by a talus of heavy quarried stone or boulders, sloping 3 to 1, from extreme high water.

Expenditure during fiscal year 1907-8, $13,229.55.

CHEBOGUE.

Chebogue harbour, Yarmouth county, is situated about seven miles south of the town of Yarmouth, near its mouth and surrounded by Fox island, Veal island, Jacko island and Shortliff point, is a small but well protected anchorage or roadstead, which affords shelter to a considerable number of fishing vessels and other small craft engaged in fishing and general trade. The anchorage is partly protected on the south by Fox island, but its western portion, which is mostly dry at low water and much used at or near high tide by boats plying between Chebogue point and other ports, is guarded by a gravel bar or beach, 800 feet long, about 20 feet wide, from high water to high water, and 4 to 5 feet above H.W.O.S.T.

To preserve the beach and the anchorage north of it, the department, in 1900-1, at a cost of $1,798.34, built 360 feet in length of beach protection work. The cribwork is 8½ feet high, 8 feet wide on top, plumb on the beach or shoreward side, battering 1 in 4 on the back or harbour side, and substantially built of round logs, well bolted, fendered, filled with ballast and covered with 3-inch plank.

It was completed in 1903-4. For details see annual report 1905-6.

In 1907-8, the sum of $71.86 was expended in fastening a length of 160 feet of the floor of the work, which has been partially lifted by ice last winter.

CHERRY HILL.

Cherry Hill, Lunenburg county, is a small fishing station, situated five miles southwest from Petite Rivière, and one mile from Broad Cove. The population of the place comprises about 100 people, engaged in fishing and farming.

The harbour is a small but well sheltered inlet among the rocks, affording good protection for 15 fishing boats.

In 1907-8, the department expended the sum of $500 in digging by hand, a boat channel 562 feet long, 38 feet wide and of an average depth of about 2 feet, giving a depth of water, at L.W.O.S.T. of nearly 3½ feet.

Spring tides rise 6 feet; neaps, 5 feet.

CHETICAMP HARBOUR.

Cheticamp Harbour, Inverness county, is on the west coast of Cape Breton, 14 miles to the northward of Margaree harbour.

The harbour is formed by Cheticamp island and a beach of sand and shingle between its northern extremity and the main land; it is entered from the north through a dredged channel.

In 1905-6 and 1906-7, the sum of $5,938.01 was expended in constructing works designed to arrest the movement inwards of a beach on the main land, opposite the inner end of the dredged channel and the consequent shoaling of part of harbour and wharf property, and consisting of brush and stone work, 624 feet in length and 22 feet in average width, parallel to the shore line, and two 'groynes' respectively 80 and 100 feet in length, and in procuring the materials required for the construction of cribwork blocks at the outer ends of the groynes.

During the fiscal year 1907-8 the sum of $883.02 was expended in constructing the cribwork blocks at the outer ends of the groynes, in repairing and strengthening the outer groyne.

Total expenditure (dredging not included) to March 31, 1908, $6,821.03.

CHURCH POINT.

Church Point, Digby county, is situated on the southeast side of St. Mary's bay, six miles southwest of Weymouth. It has a population of 200 people, engaged in farming and fishing.

The works, which consist of a wharf, a retaining wall and a breakwater, appear to have been built between the years 1855 and 1866, at the joint expense of the inhabitants and the provincial government.

In 1875-6, the departmnet expended the sum of $2,000, the inhabitants contributing an equal amount, in repairing the northern face and in building an 'L' 72 feet long, by 20 feet wide, at right angles to it, with the object of preventing gravel from working around the outer end. The movement of the gravel, which is from south to north, has always been more or less of a difficulty and a detriment to the port.

Since 1890-1, the department has expended various sums in repairing, improving, &c., the work of which full details are contained in annual report of 1906-7.

In 1907-8, the sum of $1,999,36 was expended in completing to full height, the portion of the reinforcing block on the north side of the breakwater, 93 feet long and 13 feet wide.

COW BAY (PORT MORIEN).

Cow Bay (Port Morien), Cape Breton county, is on the eastern coast of Cape Breton island, about 18 miles to the eastward of the entrance to Sydney harbour.

A breakwater, built by the owners of the Gowrie coal mine, on the north side of the bay, came under the charge of the department in 1873. It originally extended 1,374 feet to 17 feet at low water, or to 23 feet at high water, and was about 44 feet in width. The area of the basin inclosed between it and the shipping pier of the Gowrie mine, now the property of the Dominion Coal Company, was 17 acres, 10 acres of which had a depth of from 9 to 17 feet at low water.

The breakwater was seriously damaged during the great gale of August 24, 1873. Extensive repairs and improvements were made nearly every year up to 1895, when it

consisted of 220 feet of old work, protected on the seaward side by a beach of shingle and boulders; of 360 feet of old work, 44 feet in width, with a new inner face work and a 'break' on the seaward side, built over the remains of the old work, and 793 feet of inner work with counterforts and connecting outer face works. The inner and outer face work were from 30 to 20 feet apart; they were connected by tie walls and the spaces were filled with earth and stone.

In 1895 and 1896, a portion of the breakwater, 260 feet in length (1,114 feet from the shore end outward), was destroyed; the outer face works, from 1,114 feet from the shore end inward, were badly damaged and ballast was carried over the work and deposited in the dock, along the inner face, from 581 feet to 1,114 feet from the shore end.

Large expenditures were made every year, from 1896-7 up to 1906-7, in repairing and strengthening the breakwater from 1,114 feet from the shore end inward. The outer works were reconstructed and stengthened by filling the face-chambers with concrete and by close-piling; the stringers and covering of the inner work, from 581 feet to 1,114 feet from the shore end, were renewed; a portion of the inner face work, 350 feet in length (187 to 537 feet from the shore end) was widened and reconstructed.

During the fiscal year 1907-8, the sum of $11,509.78 was expended in continuing the placing of large concrete blocks against the seaward face of the breakwater, commenced in 1906-7; renewing the close-piling of 133 feet of inner face work; removing about 190 tons of ballast from the dock along the inner face; constructing a cribwork block, 48 feet in length, 14 feet in width and 10 feet in height in extension of a block at one junction of the seaward face with the beach, and in general repairs to the breakwater and buildings.

Twenty-one concrete blocks were placed on the seaward side of the breakwater, nine having a combined length of 107 feet and averaging, in width and height respectively, 11 and 12 feet, between the inner and central counterforts, and twelve having a combined length of 155½ feet and averaging 8½ feet in height and 8 feet in width at the bottom and 2 feet 9 inches in width at the top, extending outwards from the junction of the face work with the beach.

CRIBBIN'S POINT.

Cribbin's Point, Antigonish county, is on the west side of St. George's bay, eight miles to the southward of Cape George, and five miles to the northward of the entrance to Antigonish harbour.

The wharf, completed in 1892-3, extends 300 feet in a southerly direction from the point, and has a road approach, 195 feet in length. It is 20 feet in width, for a distance of 120 feet from the inner end, and 30 feet for the remaining 180 feet; the inner 50 feet of the work is built of stone, and the outer 250 feet, of close-faced native timber cribwork, fully ballasted.

The face-timbers having become weakened by the ravages of the teredo, during 1896-7-8-9, the outer end, the seaward face for a distance of 20 feet, and the inside face for a distance of 10 feet, from the outer end, were close-piled with creosoted timber; a talus of quarried stone was placed along the seaward face; the work was reballasted where necessary, and a 'timber break,' 100 feet in length and 2½ feet in height above the cap-timber was placed on the seaward side of the inner end of the wharf to prevent the sand outside from being washed on to the work during storms.

During 1899-1900, the sum of $1,000 was expended in obtaining a portion of the creosoted timber required in the construction of a proposed extension of the wharf.

During the year 1900-1, the sum of $3,079.98 was expended in procuring the balance of the timber required for the extension, and in repairing the outer end of the old work, which was almost destroyed during the severe gales in the autumn of 1900. The repairs consisted in reconstructing the top of the outer end of the wharf, for a distance of 66 feet, and to an average depth of eight feet, and in placing heavy quarried stone in the talus on the seaward side of the reconstructed work.

As the sand at the end of the wharf, at which there were originally 11 feet of water, at low water, had made up to a height of about 6 feet since its completion, leaving but 5 feet of water at low water, and as it was necessary to found the extension on the original bottom, the dredge *George McKenzie* was engaged, from May 30 to July 12, 1901, in dredging out the foundation for the new work, and the approaches thereto, at a cost of $1,704.44.

During the year 1901-2, the sum of $2,896.31 was expended in the construction of the extension to the wharf, for which the materials were procured during 1899-1900-1. The new block is 48 feet long and 20 feet wide; it has been placed across the end of the wharf, forming an 'L' 18 feet in length, intended to retain the stone in the talus. The block is of an average height of 20 feet, and is constructed of round timber cribwork, laid open-faced, with creosoted timber in the substructure, close-sheathed on all outer faces, and filled in solidly with ballast.

During the year 1904-5 the sum of $2,127.41 was expended in close-sheathing the whole of the inner face of the old work; in renewing a portion of the top of the inner end, comprising floor-stringers, covering and cap; in repairing the stone retaining wall at the inner end; in extending the 'timber break' a further distance of 75 feet, and in placing additional stone on the talus.

During 1906-7, the sheathing on the seaward face of the old work was renewed; floor-stringers, covering and cap were renewed where necessary, and the work was reballasted in places, at a cost of $941.08.

During the fiscal year ended March 31, 1908, the sum of $802.69 was expended in constructing a squared timber 'break,' 4 feet high, on the seaward face of the outer end of the work, to prevent the gravel from being swept over the wharf by the sea; in strengthening a portion of the seaward face of the work by close-sheathing; in reballasting where necessary, and in placing additional stone in the talus, at its outer end.

CULLODEN.

Culloden, Digby county, is a fishing and farming settlement of about 150 people, situated on the coast of the Bay of Fundy, six miles northwest from the town of Digby, and three miles southwest from Digby Gut.

In 1907-8 the department, in order to afford some protection to the fishing fleet, built a breakwater on the west side of Broad Cove. The work, which was done by contract, is 120 feet long, 30 feet wide and from 16 feet to 28 feet high. At the outer end of the work, which is just at low water mark, there is a depth, at high tide, of about 24 feet of water. The shore end of the work is rock bank, 100 feet long, 30 feet wide and from 2 to 15 feet high. The outer half length of the breakwater is sheathed with 4-inch creosoted plank from the bottom to the level of half tide.

Expenditure during 1907-8, $6,175.

DIGBY.

Digby, Digby county, is the shiretown of the county, with a population of about 1,500 people, beautifully situated on the southwestern end of Annapolis basin. It is an important station of the Dominion Atlantic Railway, 67 miles north of Yarmouth, 150 miles from Halifax, and 20 miles from Annapolis. It is also the port of call for the daily steamer of the Dominion Atlantic Railway plying between Digby and St. John. The harbour is open at all seasons and well protected from nearly all quarters; storms, however, from the north and northeast drive a heavy sea against the pier, and if, at such times, there be much drift ice in the basin, the structure is likely to suffer damage.

Full details of construction and repairs are contained in the annual report of 1906-7.

In 1907-8, the sum of $1,363.85 was expended in miscellaneous repairs and renewals, and $650 in the purchase of Georgia pine for further extensive renewals next year.

Spring tides rise 24 feet; neaps, 20 feet.

EAST JEDDORE.

East Jeddore, Halifax county, is a settlement of about 600 people, scattered along the eastern side of Jeddore harbour, about thirty miles east of Halifax, and ten miles west of Ship Harbour. The inhabitants engage chiefly in fishing, the fleet comprising ten schooners and a number of small boats.

The harbour is an excellent one with a good shelter and easy approach, the channel being from 20 feet to 40 feet deep, and from 800 to 1,000 feet wide.

Hitherto there has been no loading or landing pier in the harbour, and goods shipped by or landed from schooners, have had to be transferred to and from vessels in boats. In the fiscal year ending June 30, 1904, the department expended the sum of $1,403.88 in constructing a pile-wharf, 100 feet long, 25 feet wide and with an 'L' at the outer end, giving a face length of 40 feet. The height of the work along the outer face is 20 feet, giving a depth of water at L.W.O.S.T. of about 10 feet.

In the year 1904-5, the sum of $928.07 was expended in repairing and partially rebuilding the work which was seriously damaged during the winter by exceptionally heavy ice.

In the year 1907-8, the sum of $847.70 was expended in constructing a substantial block of cribwork, 40 feet long, 20 feet wide and from 13 to 19 feet high, under the north corner of the wharf, to prevent further damage by ice.

Spring tides rise 6 feet; neaps, 5 feet.

EAST RIVER, SHEET HARBOUR.

Sheet Harbour is situated on the Atlantic coast of Nova Scotia, in the eastern part of Halifax county, and is distant about 60 miles to the eastward of the mouth of Halifax harbour.

This harbour is one of the finest in Nova Scotia, being of considerable extent and having an abundant depth of water. It runs inland some 6½ miles to Jared's Point, where it divides into two arms, called respectively the West and East rivers.

On January 9, 1889, a contract was entered into for the construction of a ballast wharf on the eastern side of the East river, starting from the end of the remains of Hall's wharf, running southerly a distance of 180 feet, and 20 feet wide, with an 'L' 20 feet long and 20 feet wide at the southern end, the work being built of round timber and the top, which is three feet above high water springs, covered with 3-inch plank.

The work was completed during November, 1890, and has proved of great benefit not only as a ballast wharf, but also as a public wharf.

At 10 feet from the face of the wharf, there is from 14 to 16 feet of water at low water springs, which depth will accommodate the largest vessels that frequent the harbour.

In 1891, miscellaneous repairs were made to the wharf at a cost of $150.

In 1907-8, the sum of $1,199.88 was expended in building a commodious freight shed, 80 feet long, 30 feet wide, on the wharf for the convenience of local merchants and shippers.

This work was transferred to the control of the Department of Marine and Fisheries on September 3, 1889.

EATONVILLE.

Eatonville is a small settlement where extensive lumbering interests have been carried on for the last twenty-five or thirty years. It is situated about 12 miles west of the town of Advocate.

About eighteen months ago, a severe storm considerably damaged the breakwater, and at its last session, parliament voted the sum of $3,000 to make the necessary repairs.

A portion of the breakwater, 75 feet long, 22 feet high and 20 feet wide was entirely rebuilt. About 1,500 tons of ballast were put in to secure the structure into position. Besides renewing the top 3 feet in height of the entire work, the inside and end faces were sheathed for their entire length. The character of the work done was of the usual solid and continuous cribwork.

Total expenditure during the fiscal year ended March 31, 1908, $2,998.06.

ESKASONI.

Eskasoni, Cape Breton county, is situated on the northern side of East bay, the eastern arm of the Big Bras d'Or lake, about seven miles from Benacadie point, at the entrance to and nine miles from the head of the bay.

The harbour is formed by outlying islands and connecting beaches; it is large with a good depth of water, and perfectly safe.

On March 8, 1906, a contract was entered into, in the sum of $2,875, for the construction of a wharf off Brown's shore; but, owing to the non-delivery of the creosoted timber required, the work of construction was not commenced until July 24, 1907. The work was carried on vigorously, and completed in a satisfactory manner in the latter part of September.

The work is 188 feet in length and 20 feet wide, with an 'L' on the western side of the outer end, 20 by 20 feet, and extends to 12 feet at low water, with the exception of a cribwork shore abutment, 22 feet in length, it is constructed on creosoted timber pile-bents, consisting of five piles each, and is protected by creosoted timber fender-piles on each side of the approach, for a distance of 39 feet and around the three outer faces of the pile-head.

After the completion of the work under contract, the sum of $100.70 was expended, by day labour, in the construction and fencing of a road, 250 feet in length and 20 feet wide, to connect the wharf with the public road, making in all an expenditure for the fiscal year 1907-8 of $3,102.50.

FINLAY POINT.

Finlay Point, Inverness county, is on the west coast of Cape Breton island, three miles north of the entrance to Mabou harbour.

The work at this place, a wharf commenced in 1902-3 and completed in 1904-5, consists of cribwork, 15 feet in width on top, extending, from low water, 146 feet to 3 feet at low water, and an approach of brush and stone, 170 feet in length, with a talus of quarried stone on its seaward side. Spring tides rise 4 feet.

In 1905-6, the sum of $74.99 was expended in repairing and strengthening the brush and stone approach at its junction with the cribwork.

During the fiscal year 1907-8, the sum of $247.93 was expended in repairing and strengthening the work. A cribwork block, 25 feet by 18 feet, was built adjoining the inner face at the outer end of the cribwork; the cribwork was partly reballasted, and some quarried stone was placed on the seaward side of the cribwork and approach.

AMHERST HARBOUR (FORT LAWRENCE).

Amherst Harbour is situated at the head of Chignecto bay, near the mouth of the LaPlanche river, about two and one-half miles from Amherst town. The town of Amherst is probably the most important, prosperous and thriving industrial town in the province of Nova Scotia, and, as it is a manufacturing centre of some magnitude it can readily be seen that efficient water transportation is essential to its future growth.

Five years ago, the department constructed a large pile-wharf at this place, and eighteen months later the Department of Railways connected it with the Intercolonial Railway by a siding.

That wharf consisted of a stem, 249 feet in length and 36 feet wide on top, which stem runs from the dyke to the edge of the channel of the river, at which latter place it is 44 feet in height; the wharf proper begins at the outer end of this stem and runs seaward a distance of 300 feet, following the inner edge of the channel. It is 50 feet wide and has a common height of 44 feet along its outer edge and 28 feet on the inner side. The whole structure is constructed of pile trestle bents, placed 8 feet, centres to centres, whilst the piles in the bents are separate from each other, 7 feet between centres. These are braced not only with cross-bracing, but also with braced piles carefully driven and strongly fastened to the heads of the outside bearing piles. The whole work is fendered with double fenders of a special large size. There are also two strips of longitudinal walings. All the top timbers are 12 x 12 inches, with the exception of the covering, which consists of 5-inch timber, fastened to the floor stringers by ⅞-inch iron bolts, 14 inches long. The cost of this work was $16,072.

During the fiscal year ,the sum of $23,957 was expended in effecting repairs to the old wharf, sheathing the same, providing another docking pier and constructing a freight shed.

The freight shed was erected between the two wharfs, on the marsh land, and is 50 feet long, 20 feet wide, with shingled roof, and clapboarded on the sides and ends.

Of the old wharf, about 35 piles were replaced and about 50 braces renewed. In order to prevent further damage to this wharf, in future winters, the old work was sheathed from top to bottom, with the exception of the inner side, which was left open in order that the mud might accumulate between the piles, and thus add to the solidity of the structure.

The new wharf is situated about 350 feet farther up stream from the old work. It is 360 feet long and 64 feet wide, and has a height along its outer face of 28 feet. The whole length of it, and its two ends can be used for docking purposes, after suitable beds for the vessels have been made. It is constructed of pile trestle bents, separated 8 feet apart.

The whole work is fendered with double fenders, the outside face and the outside halves of the two ends are close piled, so as to prevent the ice from getting an opportunity to damage the fender or bearing piles.

Spring tides rise here from 40 to 41 feet; neaps from 33 to 34 feet.

FOX ISLAND.

Fox Island, Halifax county, is situated on the Atlantic coast of Nova Scotia, about 13 miles east of Halifax and about 900 feet from the mainland. It is a very small island, being some three or four acres in extent, and no point on it is more than 6 feet above H.W.O.S.T. It has no permanent inhabitants, but during the summer season, is used as a fishing station by a number of fishermen. Until 1879 it was connected with the mainland by a shingle and gravel bar, which, being bare at all times of tide, was used as a road for carts hauling supplies to the settlement on the island. Besides serving as a road, the beach with the island formed a harbour for fishing boats. During the early part of 1880, the sea broke through this beach, and the inroads continued until 1885, when the beach ceased to afford adequate shelter or to serve as a means of communication between the mainland and the island.

To restore its usefulness, the department, in 1886-7, built beach protection works extending over the whole length of the beach for a distance of 935 feet. This work consisted of round timber cribwork, battering 1 to 4 on the sides, 13 feet wide on top, from 4 to 6 feet high with a stone slope of 2 to 1 on each side, extending up to 2 feet below the top. The whole cribwork was filled with stone to the level of the top timber.

In 1892, an extension was built, 252 feet in length, to protect the main part of the island.

In 1900-1, the sum of $1,243.63 was expended in rebuilding 410 feet in length, with an average width of 12½ feet and a height of 6 feet.

In 1907-8, the sum of $999.03 was expended in taking down and rebuilding a portion of the outer end of the work 150 feet long, from 12 to 14 feet wide and 7 feet high.

Spring tides rise 6 feet; neaps, 5 feet.

FREEPORT.

Freeport, Digby county, is situated on the southern end of Long island, on the east side of Grand Passage, 40 miles southeast from Digby Gut and 25 miles southwest from Trout Cove. The population consists of about 700 people engaged chiefly in fishing and farming. It is a port of call for subsidized steamers plying between Yarmouth, N.S., and St. John, N.B., but owing to the want of a proper landing pier and to the prevalence of fog, in which it is not practicable to tranship freight and passengers into small boats, which was the only means of landing, the steamers were seldom able to stop, and in many cases, passengers and freight were carried through and landed on the return trip at the port from which they started.

To provide a much needed landing pier for local trade, as well as to provide some measure of shelter for the fishing fleet, the department, in 1905-6 built a breakwater at a cost of $13,923.92.

The work is a substantial structure of stone-filled cribwork, 251 feet long, 30 feet wide on top and from 14 feet at the inner end to 32 feet high at the outer end. The north or seaward side and the outer end are close-sheathed, the north side being provided with a solid timber break 5 feet high; the lower portion of the work, from the bottom up to 8 feet above L.W.O.S.T., or up to a plane 17 feet below the floor, is wholly of creosoted timber as a protection against limnoria. At the outer end of the work, at L.W.O.S.T., is a depth of about 6 feet of water. The shore end of the work is an approach 76 feet long of stone, the south side being walled up with a batter 1 in 12 like the cribwork, and the north side is built of large rocks, laid with a slope of 1 in 2. On the south side of the work, is an incline 8 feet wide, running down 1 in 7 to the level of the platform, 6 feet above low water, for the convenience of boats and small craft. The work has proved of great benefit both to the fishing industry and the local trade.

In 1907-8, the department expended the sum of $142.89 in building a small freight shed, 30 feet by 15 feet, on the breakwater for the convenience of local shippers and merchants.

Spring tides rise about 21 feet.

FRENCH VILLAGE.

French Village, Halifax county, is a small scattered village of about 150 people, chiefly engaged in fishing; it is situated on the east side of St. Margaret's bay, twenty-one miles west of Halifax.

In 1904-5, the department expended the sum of $2,037.67 in constructing a pile-wharf, 150 feet long, 25 feet wide, with an 'L' on the outer end, giving a face length of 60 feet and a depth, at L.W.O.S.T., of about 18 feet.

The shore approach to the wharf is a rock bank, 50 feet long and from 3 feet to 6 feet high.

In 1907-8, the sum of $150.02 was expended in completing the freight shed on the end of the wharf, for the accommodation of local trade.

Spring tides rise 6 feet; neaps, 5 feet.

FRIAR'S HEAD.

Friar's Head, Inverness county, is on the west coast of Cape Breton island, 6 miles to the northward of the entrance to Margaree harbour.

A work, undertaken in 1900-1, to close an opening in a ledge of rock with the object of affording partial shelter to a small wharf and anchorage for boats, and completed in 1902-3, consisted of a concrete wall, 90 feet in length, 4 feet in width on top, and 8 feet in height from 1 foot above low water. In 1903-4, the wall was extended 13 feet, and a wall 4 feet in height and 4 feet in width was constructed on its seaward side, to prevent undermining.

During the fiscal year 1907-8, the sum of $396.90 was expended in removing boulders from the channel leading to the anchorage.

FRUDE'S POINT.

Frude's Point is situated about 3½ miles northeast of Lockeport town. Five years ago, a small wharf of blocks and spans was constructed by the department, but three years ago, the Halifax and Southwestern Railway Company decided to build their line near this wharf and locate what is now known as Lockeport station within 250 yards of it. As the people of Lockeport and its business interests could best be served from this locality, they asked for an enlargement of this wharf.

The former wharf was therefore doubled in width and extended in length an additional 264 feet, at a cost of $8,900, about $2,400 of which was expended during the last fiscal year. The wharf is 40 feet wide, and has from 16 to 21 feet of water along the outside 265 feet. It has one railway track and should the business justify it, there is sufficient room for two additional tracks.

During the last fiscal year, 65 feet in length of this work was constructed, and the top half of about 125 feet in length of the remainder was completed.

Spring tides rise here 6½ feet; neaps, 5 feet.

Expenditure, $2,401.03.

GEORGEVILLE.

Georgeville, Antigonish county, is on the southern shore of Northumberland strait, six and a half miles southwest from Cape George.

In 1892-3, a wharf, 207 feet in length and 20 feet wide, with an 'L' 20 by 20 feet, on the western side of the outer end, was constructed to afford the inhabitants shipping and landing facilities; and during 1896-7-8, an extension, 44 feet in length, 40 feet wide, with an 'L', 20 by 24 feet, was added thereto. The inner end of the wharf, for a distance of 87 feet, was of stone, covered with plank, and the remainder of the work, of squared timber cribwork, protected by fenders and close-sheathing.

During the severe northwest gales of September 12, 1900, which caused so much damage in the Gulf of St. Lawrence, the woodwork on the stone approach was partly lifted by the sea and moved several feet, and the sum of $291.23 was expended in putting it back into position, but, as shortly after, it was again disturbed by the sea, during 1901-2, the sum of $699.47 was expended in the removal of the woodwork on top of the stone approach; the stone wall under it was taken down to a depth of 4 feet and, in its place, cribwork was substituted, fully ballasted and covered with the old plank, and the outer faces of both cribwork and stone wall were close-sheathed.

The sum of $2,500 was voted for expenditure during 1903-4 towards the construction of an extension to the wharf, and the amount was expended in procuring the necessary materials, and during 1904-5, the extension, 50 feet long and 25 feet wide, was completed, at an expenditure of $2,000.

The sum of $3,000 was voted for expenditure during 1905-6, in the construction of a further extension to the wharf, 48 feet long and 24 feet wide, with an 'L' on the western side of the extension, 40 feet long and 24 feet wide, and for the improvement

of the road connecting the wharf with the public road. The road was improved at a cost of $299.81 and the extension was completed, but, owing to stormy weather and the loss of some materials, the 'L' could not be completed with the balance of the amount authorized; although most of the materials required for its construction had been obtained.

During the fiscal period ended March 31, 1907, the sum of $1,799.75 was expended in the completion of the 'L', for which the most of the materials were obtained during the previous fiscal year.

The sum of $1,182.75 was expended during 1907-8 in urgent repairs to the old 'L', and in obtaining the materials required for the construction of a triangular block, to be placed in the angle formed between the 'L' on the old work and the extension, where the seas strike the work with great force and cause constant damage.

GLACE BAY HARBOUR.

The harbour of Glace Bay, Cape Breton county, is on the northern coast of Cape Breton Island, twelve miles to the eastward of the entrance to Sydney harbour.

By agreement dated October 19, 1904, the Dominion Coal Company undertook for and in consideration of the sum of $25,000, to make certain improvements in the harbour of Glace Bay, estimated to cost $34,000.

The improvements have been completed according to agreement, with the exception of inside dredging; and the amount expended during the last fiscal year was $9,250.65, including $9,172.62 for dredging.

The sum of $5,000 was appropriated for expenditure, in 1907-8, towards the construction of a work to protect the public road crossing the beach, at the head of Big Glace Bay, and separating the bay from Big Glace Bay lake.

Up to March 31, 1908, no work had been commenced or expenditure incurred.

GRAND ETANG.

Grand Etang, Inverness county, is on the Gulf of St. Lawrence, about midway between the harbours of Margaree and Cheticamp.

A contract entered into for the construction of works designed to improve the entrance to a large pond and thus make it available for the use and shelter of fishing boats and small vessels, was completed in 1894-5.

The works consisted of two piers placed 87 feet apart, except at the entrance where the distance between them was 44 feet. Each pier consisted of brush and stonework, 135 feet in length; brush and stone embankment with talus and covering of stone, 130 feet in length; open-faced cribwork, 100 feet in length, and a close-faced cribwork head, 30 feet in line of work by 48 feet, with creosoted substructure. About 200 feet of the brush and stonework on each side was founded on a bottom excavated to 1 foot above extreme low water, and the remainder of the pier on the natural bottom, the depth at the outer end being 4 feet 6 inches at extreme low water, or 8 feet 6 inches at extreme high water.

Subsequent to the completion of the protection works, a bridge was built across the pond about 500 feet from the inner entrance, and, in 1899, a channel was dredged by the department between the piers to 6 feet at extreme low water.

The amount appropriated for expenditure, during the fiscal period of nine months ended March 31, 1907, was re-voted for expenditure in 1907-8 in reconstructing the outer block on the northeast side; raising and repairing the outer block on the southwest side; renewing ballast in open-faced cribwork, and in replacing covering stone of brush and stone embankment.

During the fiscal year 1907-8, the sum of $3,959.90 was expended in removing the remains of the outer block on the northeast side, in procuring the creosoted and

native timber required for reconstructing it, and in reconstructing part of the brush and stone embankment on each side.

GROS NEZ.

Gros Nez, Richmond county, is a small fishing station at the eastern extremity of Petit de Grat island, which lies to the eastward of Madame island.

For the purpose of restoring to its original condition, a beach connecting the mainland with an outlying rocky islet, which formed a natural landing place, during 1885-6-7, a breakwater was built on top of the beach, extending from the mainland to the islet.

The breakwater is 150 feet in length and 14 feet wide, and consists of 125 feet of round timber cribwork and of stone embankment 20 feet in length on the western and 5 feet on the eastern end.

During a very heavy southeast gale, in December, 1905, the sea destroyed the stone embankment on the western end of the cribwork, leaving a gap through which the sea ran during southerly gales and endangered the safety of boats inside.

The sum of $231.01 was expended during 1907-8 in the reconstruction of the stone embankment, the stones being laid in cement concrete, and in renewing the close-fendering on the seaward face of the cribwork wherever required.

GROSSES COQUES.

Grosses Coques, Digby county, is situated at the mouth of a small river that enters St. Mary's bay, about seven miles southwest of Weymouth, and three miles from Belliveau's Cove. The settlement comprises a scattered population of about 300 people, engaged in farming, and to a small extent, in fishing.

The works here, which were begun by the inhabitants, aided by grants from the provincial government, in or before the year 1852, consist of a sea-wall, or more properly a river-wall, a breakwater, and a short groyne, all built of round log cribwork, more or less filled with stone ballast.

The river-wall is 620 feet long, from 15 to 22 feet wide, from 15 to 18 feet high along the face with its top about 5 feet above H.W.O.S.T. In 1889-90, this work having become much delapidated, and portions of its face having fallen into the stream, the department expended the sum of $3,000 in thoroughly restoring it.

The breakwater, which is parallel to and about 70 feet distant from the river-wall, is 550 feet long, 12 to 15 feet wide, 8 to 12 feet high, with its top about level with H.W.O.S.T. It is roughly built of round log cribwork and partially filled with stone. In 1889-90, when the department restored the river-wall, the breakwater was partly rebuilt by the inhabitants.

The groyne, at the outer end of the river-wall, was 100 feet long, 15 feet wide, and from 6 to 10 feet high. To a certain extent it served to keep the gravel from washing into the channel between the breakwater and the river-wall, but it became a complete wreck several years ago.

In 1904-5, the sum of $1,917.70 was expended in improvements and renewals. The work done consists of the extension of the breakwater on the south side of the stream mouth by a new block, 60 feet long, 20 to 26 feet wide and from 16 to 20 feet high. On the shore end and south side of this new block, the ancient groyne was restored by the construction of a new block, 70 feet long, 10 feet wide and 6 feet high. On the north side of the stream mouth, the old breakwater was extended by a new block, 100 feet long, 11 feet wide and from 8 to 12 feet high. The whole of the above work is of solid stone filled cribwork.

In 1907-8, the sum of $1,980.70 was expended in:—

(*a.*) Extending the south breakwater by a block, 60 feet long, 20 feet wide and 19 feet high.

(*b.*) Extending the north breakwater (which controls the stream issuing between the breakwaters) by a block 60 feet long, 10 feet wide and 12 feet high.

(*c.*) Rebuilding a portion of the south breakwater towards its shore end, 235 feet long, 10 feet wide and 5 feet high.

All these new blocks are of substantial round log cribwork, well filled with ballast.

HALF ISLAND COVE.

Half Island Cove, Guysboro county, is situated on the southern shore of Chedabucto bay, about 18 miles to the eastward of the town of Guysboro and 12 miles to the westward of Canso harbour.

On April 25, 1906, a contract was entered into, in the sum of $6,727, for the construction of a breakwater off Hearst's Island, at the mouth of the cove, for the protection of the anchorage during easterly gales.

The necessary materials were ordered, immediately after the signing of the contract, for delivery during the following summer, but as these were found not to be up to the requirements of the specification, and new materials had to be ordered, which could not be delivered until the spring of 1907, the construction of the breakwater was not commenced until August, 1907. Good progress was made during the last season, and the breakwater was completed on November 22 following.

The work is 270 feet long and extends to 10 feet at low water, and with the exception of the approach, 30 feet in length, which is of stone, it is constructed with native round timber, 20 feet wide, on top for a distance of 200 feet, and 24 feet wide for the outer 40 feet. It is solidly ballasted, the outer face, the end and 40 feet of the inner face are close-sheathed, and the seaward face is further protected by heavy stone talus extending up to the high water line and sloping 3 to 1 outwards.

The expenditure during the last fiscal year amounted to $6,989.50.

HALL'S HARBOUR.

Hall's Harbour, King's county (for general description see Annual Report, 1906-7).

In 1907-8, the sum of $1,595.46 was expended in the purchase and delivery of timber for rebuilding the shore end of the breakwater and the whole length of the wharf or retaining wall on the east side of the inner harbour.

HARBOUR BOUCHE.

Harbour Bouche, Antigonish county, is situated on the southern side of St. George's bay, about three miles to the westward of the northern entrance of the Gut of Canso. It is a small natural harbour, about half a mile in length and half a mile in width, with a depth of about 14 feet at low water.

The sum of $3,800 was voted for expenditure during 1907-8, for the purchase of Crispo's wharf and for its extension to 11 feet at low water.

The proposed extension will consist of a creosoted timber pile-head, 22 feet wide, on the line of wharf and 44 feet long, along the channel face.

Up to the end of the fiscal year, ended March 31, 1908, nothing was done in the matter, excepting that arrangements have been made for the delivery of the necessary materials; the expenditure amounted to $2,506.02.

HUBBARD'S POINT.

Hubbard's Point, Yarmouth county, is situated on the left or east bank of the Tusket river, 2½ miles below the village of Tusket.

For the convenience of local farmers and fishermen in the landing of sea-manure, &c., the department, in 1907-8, expended the sum of $1,059.90 in building a wharf of

dry rubble-stone work. The work is 112 feet long, 30½ feet wide, 3 feet high at the shore end and 12 feet high at the outer end, where, at H.W.O.S.T., there is about eight feet of water. Twenty-three fenders were placed on each side, and nine along the front; the fenders are bolted to the cap, which in turn is bolted to the large top stones; the top of the wharf is gravelled.

Spring tides rise about 11 feet.

INDIAN HARBOUR.

Indian Harbour, Halifax county, is a small fishing village of some 200 or 300 people, situated 29 miles from Halifax by public road, or about 16 in an air line. It is on the east side of the mouth of St. Margaret's bay, eight miles south of French Village.

In 1904-5, the sum of $1,066.16 was expended in constructing a public wharf for the convenience of local trade and fishing. The wharf is constructed of blocks and spans, the blocks being of substantial cribwork, filled with stone and well fendered. It is 20 feet wide, with an 'L' at the outer end, giving a face length of 50 feet, along which the work is 17 feet high and with a depth of water of 13 feet at H.W.O.S.T. The approach to the wharf consists of an embankment of stone and earth, 150 feet long and from 3 to 5 feet high.

During the fiscal year 1905-6, the work was completed at a cost of $749.63.

In 1907-8, the sum of $299.22 was expended in blasting and removing rocks and boulders, which obstructed the channel at and near the wharf.

Spring tides rise 6 feet; neaps, 5 feet.

IONA (OLD WHARF).

Iona, Victoria county, is on the northern side of Barra strait, which connects the Great with the Little Bras d'Or lake. It is a station on the Intercolonial Railway, and a landing place for the steamer, which, carrying mails and passengers to and from Baddeck, connects twice a day with the express trains going east and west.

The old wharf, so called to distinguish it from the new wharf built on the eastern side of the railway bridge, was originally constructed by the provincial government, but was acquired by the department, by which it was reconstructed and extended.

The work is 195 feet in length on the western face, and consists of an approach, 129 feet long and 20 feet wide, of a span, 24 feet in length, and of a 'head', 42 feet wide on the western, 22 feet wide on the eastern face and 70 feet long on the channel face. The approach is constructed of close-faced timber cribwork, partly covered with gravel and partly planked over; the head is built on creosoted timber piling, and was protected with hardwood fenders.

During the fiscal year ended March 31, 1908, the sum of $369.70 was expended in procuring and placing 20 creosoted timber fender piles, faced with hardwood plank down to low water, around the 'head,' in place of the hardwood fender-piles, which had been destroyed by the teredo below the line of low water.

IRISH COVE.

Irish Cove, Cape Breton county, is on the southeastern shore of the Great Bras d'Or lake, near the entrance into East bay.

The wharf, completed in 1892-3, is a block and span structure, of native timber, 161 feet in length and 20 feet in width, and consists of a shore abutment, 47 feet long, of a central block 20½ feet long, and of an outer block, 57 feet long, with an 'L,' 20 by 20 feet.

The wharf was built originally too low, and during 1904-5 the outer block was raised 2 feet, and the close-piling around it, which had been badly damaged by the teredo, was renewed.

During the year 1907-8, the sum of $424.02 was expended in raising the inner end of the wharf to the level of the outer portion, and in the renewal of 40 pieces of close-piling; and the sum of $675.67 was expended in the diversion of a brook, which, emptying into the lake near the western side of the wharf, was endangering its safety as well as its usefulness. The brook, at a point about 250 feet to the westward of the wharf, was closed by the construction of a cribwork dam, filled with brush and stone, and a new channel, 90 feet in length and 25 feet wide at the bottom, was opened for it, through the shingle beach.

Total expenditure at this place, for the year ended March 31, 1908, is $1,099.69.

JERSEY COVE.

Jersey Cove, Victoria county, is situated at the northeastern end of St. Ann's harbour, in the angle formed between the beach at its entrance and the mainland.

On October 21, 1906, a contract was entered into, in the sum of $4,620, for the construction of a wharf, but, up to the end of the fiscal period 1906-7, no work was done, excepting that the materials required were ordered for delivery in the spring of 1907.

The work of construction was commenced on August 8, 1907, and the work under contract was satisfactorily completed on November 14, following.

The wharf is a block and span structure, extending to 10 feet at low water, 20 feet wide, with an 'L' on the northeastern side of the outer end, 10 by 20 feet; it is connected with the public road by an approach, 105 feet long and 16 feet wide, consisting partly of block and span work and partly of clay embankment and grading. The blocks are constructed of round timber, laid open-faced, with creosoted round timber substructure, extending to half tide, and the three outer faces of the outer block were close-sheathed between the fenders, with 4-inch plank of creosoted timber to half tide, and of hardwood above.

Expenditure during fiscal year of 1907-8, $4,844.13.

JOHNSTON'S HARBOUR.

Johnston's Harbour, Richmond county, is on the southern shore of the Great Bras d'Or lake, about 19 miles to the northward from the St. Peters canal, and 29 miles from the head of East bay.

A cribwork wharf commenced by the inhabitants in 1881, was raised by the department during 1883-84; extended by the addition of a native timber pile-head in 1893-94; the latter was repaired during 1901-2.

An examination made in October, 1906, showed that all the native timber piles were much weakened by the attacks of the teredo, and that several of them had been cut into, so that the wharf was in danger of collapsing.

The sum of $1,100 was voted in 1907-8, for the reconstruction of the pile-head with creosoted timber piling.

The proposed new work is to be 40 feet long on the northwestern, 36 feet long on the southeastern, and 42 feet wide along the channel face.

The sum of $240.05 only was expended on this work during the year of 1907-8 in procuring materials and in effecting temporary repairs.

JONES HARBOUR.

Jones Harbour is a fishing settlement of some hundred and fifty people, situated about fourteen miles northeast of the town of Lockeport. During the year 1889, this department constructed a rough breakwater, consisting of a rock bank approach, 95 feet in length; of 4 cribs, 20 feet long, separated from each other by 4 spans, 15 feet wide, and a cribwork head, 38 feet long and 24 feet wide, the rest of the work being 17 feet wide. This work had got much out of repair and required attention. Besides

this a shearing pier was required so that the ice moving up and down the creek would be so diverted that the berth at the head of the breakwater or wharf would be rendered tenable at all times of the year.

The rock bank approach was renewed, about 4 feet in height requiring replacing; the cribwork was stripped to a depth of 6 feet from the top, and this part rebuilt; the work was extended 10 feet in length and the shearing pier 50 feet long, 10 feet wide and 7 feet high, was constructed, about 125 feet to the north of the breakwater.

Spring tides rise here 6½ feet, neaps 5 feet.

Expenditure, $1,336.56.

JUDIQUE (BAXTER'S).

Judique (Baxter's), so called to distinguish it from Little Judique and Judique (McKay's Point), is on the western coast of Cape Breton Island near Campbell's Point, which is midway between Long Point and McKay's Point, and 4 miles distant from each.

During the year the sum of $891.52 was expended in procuring the materials required in the construction of a wharf to extend 176 feet to 1½ feet at extreme low water. The wharf is to be a continuous cribwork structure, fully ballasted and protected at the outer end and on the northern and southern sides, for 40 and 24 feet respectively, from the outer end inward, by close-sheathing. Spring tides rise 4½ feet.

JUDIQUE (McKAY'S POINT).

Judique (McKay's Point), Inverness county, is on the east side of St. George's bay, 10 miles south of Port Hood and 16 miles north of the northern entrance of the Strait of Canso.

The breakwater at McKay's Point, commenced in 1898 and completed in 1900, is 725 feet in length and 20 feet in width, with an 'L,' 20 by 20 feet at the outer end of round timber, laid open-faced with creosoted timber substructure, close-fendered round the outer end and 'L' and protected on the seaward side by a talus of stone. The depth at extreme low water, at the outer end, is 6 feet. Spring tides rise 4½ feet.

In 1902-3-4, the sum of $1,292.25 was expended in replacing floor-stringers, covering and cap-timbers, that had been carried away by ice, and in reballasting and close-fendering 550 feet of the seaward face from the 'L' inward.

In 1906-7, the sum of $399.54 was expended in reconstructing the outer portion of the 'L' and in placing quarried stone in the talus, on the seaward side of the breakwater, near its junction with the 'L.'

During the fiscal year 1907-8, the sum of $306.80 was expended in completing the replacing of stone in the talus, and in saving part of the timber and ballast carried away in February, when the outer end of the breakwater, including the 'L,' was badly damaged.

LA HAVE ISLANDS.

La Have Islands (Crooked Channel), Lunenburg county, off the coast of the southern part of Lunenburg county, and opposite to and to the southward of the mouth of La Have river, are composed of from 30 to 40 islands, varying in size from a few square yards to about a square mile.

Most of the large islands are inhabited; their aggregate population being some 200 to 300 people, engaged in fishing and farming. The islands are distant from the mainland from one-half to three miles, and they are all more or less connected with the other and to the mainland, by shallow banks and mud flats covered at H.W.O.S.T., but bare or nearly so at low water. In and about the flats are numerous channels and deep holes, but boat navigation is intricate, and in many cases very circuitous.

The principal boat channel through the archipelago lies approximately east and west, and is appropriately known by the name 'Crooked Channel,' its landward end

being in Green bay, a long narrow strip or bar of sand projecting about a mile and a quarter from the main shore, but it gave no direct or easy access to the village of West Dublin, lying about two miles to the northward.

To give the inhabitants of the larger islands, viz., Bushe's and Bell's, more direct communication with the village, on the mainland, where they resort for a market, the department, in September and October, 1893, dug a boat channel, 2,300 feet long, 40 feet wide, and three to four feet deep at low water ordinary spring tides, in a northerly direction from the Crooked Channel on the south, to deep water on the north, between the extremity of the Petite Rivière beach and Bushe's island. The work was all done by hand during low water, at a cost of $923.73.

In 1906-7, the sum of $1,097 was expended in reopening 1,100 feet of this channel from 18 to 20 feet wide and from three to four feet deep, which had filled up in the thirteen years since it was first dug.

In 1907-8, the department expended the sum of $899.50 in deepening and widening, by hand digging, the boat channel for a length of 1,800 feet, that was first dug in 1893, between Bushe's island on the east and the extremity of West Dublin beach on the west. The channel is from 20 to 40 feet wide, and from two to four feet deep, through mud flats, bare at low water.

L'ARDOISE.

L'Ardoise, Richmond county, is situated on the eastern side of St. Peter's bay, near its entrance from the Atlantic ocean, and about nine miles to the eastward of the southern entrance to St. Peters canal.

An isolated breakwater, built in 1876-7, and almost destroyed in 1883, was reconstructed during 1891-2-3 . It is 400 feet long and 20 feet wide on top, and consists of a timber core, placed over the remains of the original work, the whole being covered with stone, sloping 3 to 1 on the seaward face and outer end, and 2 to 1 on the inner side and inner end. The whole surface of the work, above low water mark, was covered with stone of not less than 15 cubic feet each, and the spaces between the stones, above the line of high water, were filled in with concrete.

Since the completion of the work, a concrete wall, three feet wide on top and 4½ feet in height, with top flush with the surface of the covering, has been constructed over the outer face and ends of the cribwork core.

In order to stop the undertow from sweeping into the harbour through the gap between the inner end of the breakwater and the shore to the eastward of it, a distance of 1,195 feet, during 1903-4-5, a round timber structure, 1,145 feet in length, and a stone embankment, 50 feet long on top, were placed, filling in the gap completely.

Since 1900, slight disturbances of the stone covering of the breakwater had taken place yearly, until in the winter of 1904-5, when during a furious gale, the heavy seas threw large masses of the ice on to and against the structure, and dislodging the stone covering, cut several gaps through the top.

The sum of $491.49 was expended, during 1905-6, in closing up temporarily the most dangerous gaps in the top of the work.

The sum of $5,000 was voted for 1906-7 to place the work in thorough repair, but, owing to the shortness of the season and the exposed position of the work, out of the amount voted, the sum of $3,268.21 only could be expended during that year; however, the work was left in a safe condition.

During the last season, the sum of $993.81 was expended in continuing the work commenced during 1906-7.

The surface stone, down to low water, has been replaced, where necessary, and was carefully laid and packed as close together as possible, and above the line of high water it has been laid in, and all the spaces between them filled in with cement concrete, and at the outer end, a concrete retaining wall, 12 feet wide, 40 feet long and of an average height of 7 feet, has been placed.

LARRY'S RIVER.

Larry's river, Guysboro county, is at the western extremity of Tor bay, a bay on the Atlantic coast of Nova Scotia, 24 miles to the westward of Canso harbour.

The harbour, a channel through flats improved by dredging, was formerly protected from the eastward by a beach and bar of shingle. Since 1896, the point of the beach at the northern extremity of the bar and the bar itself have been lowered and carried inward toward the channel..

A contract, entered into in September, 1902, for the construction of a breakwater to restore the shelter formerly afforded by the beach and bar, was completed in July, 1904. The breakwater consists of two sections of stone embankment, respectively 125 and 379 feet in length, each 14 feet in width at a level of 2 feet above high water and 6 feet in average height, and a central section of cribwork, 500 feet in length, 14 feet in width on top and 11½ feet in average height, protected on the seaward side by close-fendering and by a talus of stone sloping 2 to 1 from high water. The embankments and cribwork were finished at a height of 4 feet above extreme high water. Spring tides rise 6½ feet.

During the years 1904-5-6-7, the sum of $3,591.28 was expended; $99.32 in repairing and protecting the stone embankment at the outer end of the breakwater, and $3,491.96 in constructing a 'spur' on the southwestern side and near the outer end of the breakwater, 125 feet in length, including 20 feet of stone embankment and 105 feet of cribwork fully ballasted and close-fendered on the seaward side and at the outer end.

The sum of $26.80 was expended in September last in removing stone, left on private property while work was in progress in 1905-6.

LITCHFIELD.

Litchfield, Annapolis county, is a fishing and farming settlement, with a population within a radius of a mile, of about 150 people. It is situated on the south coast of the Bay of Fundy, fourteen miles northeast of Digby Gut.

In 1904-5, the sum of $3,000 was expended in constructing a breakwater for the protection of the fishing fleet. The work, which the appropriation did not suffice to completely finish, is 170 feet long, from 20 to 25 feet wide and from 8 to 15 feet high, substantially built of round-log cribwork, filled with stone and close-sheathed on the seaward side and outer end. The seaward side is provided with a break four feet six inches high.

In 1905-6, the sum of $999.30 was expended in completing the breakwater and in under-pinning the shore end of the work, which had been undermined by an unusual freshet.

In 1906-7, the sum of $499.50 was expended in the purchase of timber for the further extension of the breakwater.

In 1907-8, the breakwater was extended a further length of 60 feet, and the road, from the main road to the breakwater, was constructed. The expenditure for the year amounted to $1,916.76.

Spring tides rise about 30 feet.

LITTLE BROOK.

Little Brook, Digby county, is situated on the thickly settled eastern shore of St. Mary's bay, Bay of Fundy, two and a half miles from Church Point, thirty-three miles south from Digby, the county town, and thirty-six miles north of Yarmouth.

Some years prior to confederation, a breakwater was built by the inhabitants, aided by the provincial government.

In 1873, four blocks of cribwork, in the middle of the breakwater, were partially destroyed by a gale, and the sum of $600 from the Provincial Navigation Securities was expended in repairs.

Since 1891-2 various sums of money have been expended in repairs, improvements, &c. details of which can be found in annual report of 1906-7.

In 1907-8, the sum of $1,999.10 was expended in taking down an old block on the inner or north side of the breakwater, which was not only in a state of delapidation, but an obstruction to the extension of the breakwater; a portion of the north side of the breakwater, adjoining the old block removed, was taken down and rebuilt, the new block being 41 feet long, 20 feet wide and 22 feet high.

LITTLE HARBOUR.

Little Harbour, Pictou county, is on the Northumberland strait, about 5 miles east of the entrance of Pictou harbour.

Of the $3,400 appropriated for expenditure in 1907-8, the sum of $1,148.52 was expended in procuring about three-quarters of the materials required in the construction, near the head of Little Harbour, of a block and span wharf extending 324 feet to 7 feet at extreme low or to 12 feet at extreme high water.

LIVERPOOL.

Liverpool is a thriving town, of some 3,000 people, situated at the mouth of the Mersey river, about 70 miles southwest of Halifax city. Fishing, shipbuilding, lumbering, pulp works, the supply of electrical power and other kindred industries are engaged in by these people.

The harbour is a barred one and in the fiscal year 1905-6, the sum of $2,998.02, was expended in removing rocks principally from this bar, there being about 995 tons of stone thus removed. During the fiscal year of 1906-7, the sum of $1,292.83 was expended in removing about 360 tons additional, and during the last fiscal year a further sum of $972.50 was expended in removing about 285 tons.

Spring tides rise here 6 feet, and neaps 4½.

LIVINGSTON'S COVE.

Livingston's Cove, Antigonish county, is on the southeastern shore of Northumberland strait, about 2 miles southwest from Cape George.

For the purpose of affording shelter to the fishing boats of the district and a landing place for steamers and small vessels, a pier, extending to 9 feet at low water, was commenced by the department in 1899 and completed in September, 1902.

The work is 312 feet in length, and is approached by a road cut through the clay bank, 105 feet in length. The pier is a continuous structure and consists of a shore abutment with stone retaining walls, 30 feet long and 18 feet wide on top; of a cribwork block, 80 feet long and 19 feet wide, and of a cribwork extension, 202 feet in length and 24 feet wide, with an 'L' on the southern side of the outer end, 24 by 24 feet. The cribwork is constructed with native squared timber, laid with 7-inch openings, is fully ballasted and fendered, and the northern or seaward face, the outer end and the southern face of the 'L' were sheathed with hardwood.

Contrary to expectations, it was found that the teredo was injuring the work, particularly on the seaward face and end, and for the preservation of the work, during 1903-4-5, a stone talus was placed along the seaward face at within 20 feet of the outer end, and creosoted piling was driven at the end of the seaward face, on the outer end and around the 'L.'

The sum of $1,000 was expended during 1905-6 in raising the stone talus, in repairing the cribwork at the inner end, and in protecting, temporarily, places on the inner face of the work, which showed signs of damage by the teredo, with native timber close-sheathing driven into the sandy bottom.

The sum of $1,800 was voted for 1906-7, to close-pile with creosoted timber the outer portion of the inner face of the work, for a distance of 120 feet ; but, as the timber could not be delivered during that fiscal period, out of the amount voted, the sum of $711.28 was expended in placing about 120 cubic yards of heavy stone in the talus and in procuring and placing native timber walings on the inner face of the work, where the creosoted piling is to be driven.

During the fiscal year ended March 31, 1908, the sum of $1,800 was expended in procuring and placing 80 creosoted timber piles on the inner face of the breakwater and in effecting slight repairs to the work, at its inner end and on the outer corners.

Spring tides rise 4½ feet.

LOWER WASHABUCK (MCKAY'S POINT).

McKay's Point, Lower Washabuck, Victoria county, is on the western side of the entrance into St. Patrick's channel, an arm of Bras d'Or lake, about two miles, by water, from the town of Baddeck.

The steamer *Blue Hill,* carrying mails, freight and passengers, makes, during the opening of navigation, two return trips daily between Baddeck and Iona Station on the Intercolonial Railway, and as McKay's Point is on her course, in order to place the inhabitants of the district in direct communication with these places, during 1904-5, a wharf was constructed at McKay's Point, extending to 12 feet at low water.

The wharf is a block and span structure, 206 feet in length and 20 feet wide, with an 'L' on the western side of the outer end, 20 by 20 feet, and is composed of a shore abutment 28 feet long; of four cribwork blocks, 17 feet long; and of an outer block 20 by 40 feet, with openings between them, 18 feet in length. The blocks are constructed of round timber, laid open-faced and creosoted to high water, lake level, fully ballasted and fendered, and the outer faces of the outer block are close-sheathed, as a protection against ice.

In 1905-6, the sum of $100 was expended in repairing the face and ends of the outer block.

During the fiscal year ended March 31, 1908, the sum of $150.39 was expended in the construction of a small warehouse, on the outer end of the wharf, for the accommodation of freight.

MABOU HARBOUR.

Mabou Harbour, Inverness county, is on the west coast of Cape Breton Island, 6 miles northeast from Port Hood.

The entrance was formerly at the southern extremity of a range of sand hills and by an intricate channel obstructed by a bar, over which there was a depth of only 4 feet at extreme low water.

The opening of a new channel through the sand hills, at their northern extremity, was undertaken in 1872. A pier, 835 feet in length, on the southern side of the new channel, was completed in 1876, and the same year the old channel was closed. Expenditures were made nearly every year from 1876 to 1902 in repairs to the pier, the construction of brush and stone work on the southern side and of protection works on the northern side of the channel.

On the completion of repairs undertaken in 1901-2, the works included:—

On the south side (*a*) the remains of a pier, 835 feet in length and 20 feet in width, founded in about 12 feet at extreme low water, sloping from about 10 feet below extreme low water, at the face, to 2 feet above extreme low water at the back.

(*b*) A work of brush and stone of various widths extending outward from the outer end of the pier about 1,600 feet, the inner end of which was 8 feet above and the outer end 5 feet below extreme low water.

(*c*) Brush and stone work at the back of the pier, 800 feet in length, 10 to 12 feet in width on top and 7 feet in average height.

(*d*) On the north side, 45 pile and brush groynes, 4 of which are from 75 to 85 feet in length, and one 45 feet.

In 1903, the minimum depth at extreme low water over bar, about 600 feet out from the head of the pier, was 8 feet 3 inches. Spring tides rise 4 feet. Since 1903, the depth over the bar has been increased by dredging to about 13 feet at extreme low water.

In 1905-6, the sum of $299.94 was expended in repairing the groynes on the north side. In 1906-7, $1,999.90 was expended in repairing the groynes on the north side and in raising the brush and stone extension on the south side.

During the fiscal year 1907-8, the sum of $2,000 was expended in repairing the groynes on the north side of the entrance, and in raising the brush and stone work on the south side.

MALIGNANT COVE.

Malignant Cove, Antigonish county, is situated on the southeastern shore of Northumberland strait, about midway between Arisaig and Georgeville, and distant about 4 miles from each.

The sum of $5,000 was voted for expenditure during 1899-1900, towards opening a channel for boats through the gravel beach into a small pond at the head of the cove, and in the construction of channel protection works. A plan and specification for works extending outward to 7 feet, at low water springs, were prepared, and the sum of $3,893.35 was expended during the year in procuring the materials required for the construction of the channel protection works.

The work proposed, included the construction of piers, placed 60 feet apart, on either side of the channel, which was to be excavated to a width of 30 feet in the bottom, and to a depth of 2 feet below low water. The piers extending 248 feet inwards, through the beach, from low water outside were to be 10 feet wide on top, and founded at low water; those extending from low water outwards, to be 16 feet wide for a distance of 60 feet, and 22 feet wide for a distance of 30 feet. All cribwork was to be built of round native timber, laid open-faced, fully ballasted, and close-sheathed at the ends and on the channel faces, the sheathing on the channel faces of the work through the beach to be driven into the beach to a depth of 4 feet below low water mark.

In 1900-1, the sum of $6,123.64 was expended in the construction of the outer piers, each 90 feet in length, and of a portion of the inner pier on the eastern side of the channel, 188 feet in length.

During 1901-2, the work proposed was completed, and a cribwork extension to the western inner pier, 60 feet long and 10 feet wide, was constructed to prevent the reopening of the old channel through the beach, and the expenditure incurred amounted to $2,464.85.

In the year 1902-3, the inner end of the western pier, which, for a distance of 70 feet, was built lower than the outer portion, was raised to the same level, a height of 2 feet, and planked over; beach protection works, consisting of a cribwork block 40 feet long, 12 feet wide and averaging 10 feet in height, and of an extension of piles, brush and stone 50 feet long, were constructed on the eastern side of the eastern pier, to prevent the sea from washing over the beach and carrying sand into the channel between the piers. The amount expended during the year was $799.94.

During the fiscal year ended June 30, 1904, the sum of $1,099.07 was expended in close-piling the outer ends of the piers and their faces, for a distance of 20 feet from the ends, with hardwood piling; in replacing ballast washed out of ends of piers, and in extending the beach protection work on the eastern side of the eastern pier, for a distance of 40 feet, with cribwork.

The amount voted for expenditure during 1904-5, viz.: $2,800, was intended for close-piling, with creosoted timber, the outer ends of the channel piers, which had been weakened by the teredo. The necessary materials were procured, but, before

delivery of the creosoted timber, it was found necessary to extend the beach protection work on the eastern side of the eastern pier, at a cost of about $500, and the remaining balance of the appropriation proved insufficient to drive all the piles as intended. The faces of the piers were prepared to receive the piles, by placing three walings on them, and of the 120 piles to be driven, 35 were placed and secured on the eastern face and outer end of the eastern pier and the total expenditure amounted to $2,799.94.

The sum of $1,000 was voted for expenditure during 1905-6 in close-piling, with creosoted timber, the outer end faces of the western pier, for which the timber had been procured during the previous year, and for reballasting the outer ends of both piers, but, as during a gale in the spring of 1905, 26 pieces of piling were swept off the beach and were lost, a portion only of the outer end could be close-piled with creosoted timber, and the balance had to be piled temporarily with hardwood timber. The ends of both piers were reballasted and some new covering was laid, and out of the amount voted, the sum of $998.42 was expended during the fiscal year.

During the fiscal year ended March 31, 1908, the sum of $1,030.17 was expended in procuring the creosoted timber required for close-piling the outer end faces of the western pier, and in replacing some stringers and planks on the said pier, but as the creosoted timber piling was delivered too late in the season, it could not be placed by the end of the fiscal year.

MARBLE MOUNTAIN.

Marble Mountain, Inverness county, is a settlement on the northern side of West bay, an arm of the Bras d'Or lake, about 14 miles to the eastward of the head of the bay.

The place was of very little importance until a few years ago, when the extensive limestone quarries there were bought by the Dominion Iron and Steel Company, who employ a large number of men and ship the output of the quarries to Sydney, to be used in connection with their smelting works.

A steamer plies four times a week, during the season, between Marble Mountain and Grand Narrows, making connections there with the Intercolonial Railway trains.

During 1905-6, the sum of $895 was expended in procuring the necessary materials for the construction of a wharf 185 feet in length and extending to 15 feet, at low lake level.

The sum of $1,359.59 was expended during 1907-8 in the construction of the wharf, for which the materials were procured during 1905-6.

The wharf is a block and span structure, 185 feet in length and 20 feet wide, with an 'L' on the northern side of the outer end, 24 by 24 feet, and extends to 15 feet at low water. The blocks are constructed with native round timber, properly ballasted and fendered, and the top is covered with 4-inch black spruce plank.

MARGAREE HARBOUR.

Margaree harbour, at the mouth of Margaree river, Inverness county, is on the west coast of Cape Breton Island, about 30 miles northeast of Port Hood. It had a narrow intricate channel through which the tide ran at the rate of four knots, and its entrance was obstructed by a bar of shifting sand over which there was, at times, a depth of only 5 feet at extreme low water.

Expenditures have been made by the department in the construction and maintenance of channel protection and improvement works on the west side of the entrance and in the construction of beach protection works on the east side.

The works on the west side include works built by the provincial government and extended by the department and works of improvement undertaken in 1900-1.

The old provincial government works (reconstructed by the department), extended 400 feet from the shore, across what was originally a false channel, to a large rock opposite the inner entrance and thence at right angles to the edge of the channel.

The work built by the department extends 595 feet from the north side of the outer provincial government work outward, along the west side of the channel. It is in four sections: 85 feet (built in 1873), 130 feet (built in 1879), 200 feet (built in 1890) and 180 feet (built in 1899), respectively, 18, 16, 18 and 20 feet in width on top and 15, 14, 12 and 6 feet in height. Each section is of round timber, open-faced, and is fully ballasted and close-fendered at the sides and outer ends. The top of the covering is from 4 feet 4 inches to 5 feet above extreme high water. The depth, at extreme low water, along the channel face, originally varied from 7 to 2½ feet. Spring tides rise 4 feet.

The improvements undertaken in 1900-1 and completed in 1902-3 with the exception of part of the submarine rock excavation, included deepening along the channel face of the extension to 8 feet at low water over a distance of about 400 feet, and the construction of a shear-dam, within the entrance, 180 feet in length, including 25 feet of brush and stone work 11 feet wide on top, 100 feet of pile and brush work 10 feet wide, and 55 feet of cribwork 22 feet wide, founded on brush in from 1 foot 3 inches to 9 feet 9 inches at extreme low water.

Expenditures were made in 1903-4, 1904-5 and 1905-6 in continuing the submarine rock excavation, in general repairs and in reconstructing 239 feet of the upper portion of the old work across the false channel.

In 1906-7, the sum of $1,002.09 was expended in partial reconstruction of the beach protection works on the east side of the entrance, and in reballasting and repairing the works on the west side.

During the fiscal year 1907-8, the sum of $2,007.78 was expended, in completing the reconstruction of the beach protection works on the east side and in completing the submarine rock excavation on the west side.

MARGAREE ISLAND.

Margaree Island, Inverness county, is situated in the Gulf of St. Lawrence, 2½ miles off the western coast of Cape Breton Island, and 27 miles northeast of Port Hood.

In 1899-1900 and 1900-1, the sum of $3,312.34 was expended in procuring materials for and nearly completing a wharf near the southern extremity of the island, 98 feet in length and 20 feet in width, including a stone abutment, 26 feet in length, and a cribwork block, extending 72 feet to 5½ feet at low water.

During a gale, in September, 1900, the 72-foot block, after losing its ballast, was moved 17 feet out of position, and the stone embankment was destroyed.

In 1901-2, the sum of $1,399.13 was expended in replacing and completing the 72-foot block, in constructing 28 feet of cribwork between it and the shore, and in making a ready-way, or approach along the face of the cliff.

In 1905-6, the sum of $499.68 was expended in repairing the inner portion of the wharf, including the construction of a concrete wall on the west side 18 feet in length, 4 feet in width and 7 feet in average height, and reballasting and covering the work between it and the east side.

Of the $200 authorized for expenditure during 1906-7 in urgent repairs at the outer end of the wharf, 25 feet of which had been destroyed, the sum of $70.95 was expended in December, 1906, in procuring materials for bulk-heading and close-fendering the existing outer end.

During the fiscal year 1907-8, the sum of $225.95 was expended in bulk-heading and close-fendering the existing outer end of the wharf, part of the materials for which were procured in 1906-7.

MARGAREE RIVER.

Margaree river, Inverness county, a large stream on the west side of Cape Breton Island, flowing through extensive and fertile meadows to the Gulf of St. Lawrence.

The sum of $1,000 was appropriated for expenditure in 1907-8, in the construction of shear-dams, &c., for the protection of intervale lands of the northeast branch.

During the year, the sum of $735.44 was expended in procuring about one half of the materials required in the construction of two shear-dams, upper and lower, in the Ross Ingraham settlement, estimated to cost, respectively, $2,300 and $1,200.

MARGARETVILLE.

Margaretville, Annapolis county, is the most important villege on the south coast of the Bay of Fundy, between Digby Gut and Scott's Bay; it is 42 miles northeast from the former, 36 miles southwest from the latter, and nine miles north of Middleton, an important station on the Dominion Atlantic Railway. It has a population of about 500 people, engaged in fishing and farming.

A pier was begun in 1837, by the provincial government, and subsequently extended to a length of 471 feet. The work was taken over by the Public Works Department in 1871, since which time it has had frequent renewals and repairs. In December, 1885, the pier was severely damaged by a storm, a breach nearly 150 feet long being made clear through it, besides receiving other injuries. The Margaretville Pier Company transferred their title in the pier to the government on August 3, 1886. In 1886-7, the above described damage was made good. In October, 1890, a severe gale made a breach of 117 feet in the outer portion of the work. In March, 1894, the remaining block, 86 feet in length, seawards from the 117 gap, was totally destroyed. In 1897-9, the outer block was rebuilt. This new block, which is substantially built of round-log cribwork, close sheathed on the seaward face and outer end, is 185 feet long, 42 feet wide, and from 22 to 23 feet high. In 1900-1, the sum of $500 was expended in renewing the floor on the shoreward end of the work.

In 1902-3, the sum of $768 21 was expended in sheathing the seaward face of the breakwater, for a length of 155 feet on the shore end, and removing gravel from the eastern or land side to improve the schooner berth. An additional sum of $1,550.50 was expended in constructing a new breakwater, 250 feet eastward of the main work. The new breakwater is 110 feet long, 16 feet wide and 7 feet high at the shore end, 25 feet wide and 16½ feet high at the outer end. The work is substantially built of round-log cribwork, well fendered, bolted and filled with ballast.

In 1903-4, the sum of $500 was expended in rebuilding a short piece on the shore end of the main or west breakwater, 14 feet long, 25 feet wide and 8 feet high, also in constructing a small inner block on the east side of the shore end, 22 feet long, 7 feet wide and 8 feet high. A few petty and miscellaneous repairs were also made to the flooring of the breakwater.

In 1904-5, the sum of $1,985.04 was expended in extending the eastern breakwater. The new block is 90 feet long by 30 feet wide, and, when completed, will be 17 feet high at the inner and 26 feet high at the outer end. At the end of the fiscal year, the new work was built to within 7 feet of its finished height. In 1904-5, the sum of $600 was expended in sheathing a portion of the outer end of the breakwater with creosoted 6-inch plank as a protection against the ravages of the limnoria.

In 1905-6, the sum of $1,579.85 was expended in a second extension to the eastern breakwater. The new block, which is substantially built of round-log cribwork, filled with ballast and well fendered, is 90 feet long, from 28 to 30 feet wide, and from 20 to 23 feet high. A small breach in the seaward face of the western breakwater, which had been made by seas and ice in the previous winter, was also repaired.

In 1907-8, the sum of $1,297.22 was expended in extensive repairs and renewals to the shoreward end of the eastern breakwater, and in removing a considerable quantity of gravel from the schooner berth, on the eastern side of the work.

MC NAIR'S COVE.

McNair's Cove, Antigonish county, is on the west side of St. George's bay, about 2 miles to the westward of Cape George.

A breakwater, 400 feet in length and 20 feet in width, was built on the north side of the cove during 1872-3-4, and, in 1878, a length of 20 feet was added thereto. In 1879, the work was carried away by drift ice to within 100 feet of the shore end down to from 3 to 6 feet below low water. During the summer of 1883, 70 feet of the shore end was rebuilt, and, during the winter of 1884, the work was extended 94 feet, but this extension was badly damaged by drift ice in April, 1885, and was subsequently carried away.

During 1886-7-8, the bottom of the damaged work was dredged out, and a new work, 160 feet in length, 34 feet wide on top, with a sloping face on the seaward side, was constructed and on its completion the total length of the breakwater was 330 feet.

The work was constructed entirely of native timber, and as it became weakened by the action of the teredo, during the years 1890-1-2-3-4, the outer end, and on each side of it, for a distance of 20 feet, was protected by creosoted timber close-piling, and its seaward face by a talus of quarried stone.

During the years 1897 to 1901, the timber wall under the sloping face, which was destroyed by the teredo, was reconstructed down to low water and close-fendered with hardwood timber; the stone talus was raised up to the top of the close-fendering, and the work was reballasted and recovered where necessary.

During 1901-2-3, the inner end of the work, which was constructed partly in 1872 and partly in 1883 and was only 20 feet wide, was, for a distance of 120 feet, widened to 30 feet, and the old top was cut down to low water and reconstructed with new materials.

During 1903-4-5, an extension, 80 feet long and 32 feet wide, placed across the outer end of the old work and forming an 'L' 40 feet in length, was constructed, as a protection to the old work, and to improve the sheltered area behind the breakwater. The work is constructed of round timber, creosoted to half tide, fully ballasted and fendered, and is protected on all outer faces with close-sheathing.

In the fiscal period ended March 31, 1907, the sum of $244.58, was expended in placing some stone in the talus, in reballasting the work in places, and in the renewal of a few pieces of covering.

The sum of $2,700 was voted during 1907-8 to reconstruct the seaward face of the work, from low water mark up, 16 feet wide and 80 feet in length, with creosoted timber bottom ; to close-sheath the new face, and to raise the talus outside to high water mark.

Up to the end of the fiscal year, the sum of $2,317.21 was expended in procuring all the necessary materials required for the work and in temporary repairs.

Spring tides rise 4 feet.

MC PHERSON'S COVE.

McPherson's Cove, Cape Breton county, is situated on the southern side of the East bay, an arm of the great Bras d'Or lake, about 32 miles to the northeastward of the St. Peter's canal, and 16 miles to the southwestward of the head of East bay.

The proposed wharf at that place will extend to 12 feet at low water, and is to be a block and span structure, 100 feet long and 20 feet wide, with an 'L' on the eastern side of the outer end, 20 by 20 feet, on top; it will consist of a shore abutment, 24 feet long, a central block, 20 feet long, and of an outer block, 20 by 40 feet, with openings 18 feet long between them. The abutment and blocks are to be built of round timber, creosoted to high water; the faces of the outer block and the western and northern faces of the central block will be close-sheathed between the fenders, as a protection against ice.

Expenditure during last fiscal year, $112.54.

MIDDLE COUNTRY HARBOUR.

Country Harbour, Guysborough county, is on the Atlantic coast of Nova Scotia, 36 miles to the westward of Cape Canso. It has an excellent land-locked anchorage, in 4½ fathoms, 4 miles inland and is navigable, for large vessels, 6½ miles and, for small vessels to Narrows Point, 8½ miles inland. Boats can ascend to the head of tide, 2 miles above Narrows Point.

During the fiscal year 1907-8, a contract entered into on March 1, 1907, for the construction of a wharf at Middle Country Harbour was completed, and the sum of $143.90 was expended by day labour in grading and fencing the right of way thereto.

The wharf is a block and span structure, 139½ feet in length, consisting of a stone abutment 21 feet in width; of three central blocks, each about 22 feet 8 inches in width, and an outer block, 22 feet in line of work by 32 feet 4 inches.

The depth at the outer end, at extreme low water, is 14 feet. Spring tides rise 6 feet.

Total expenditure for the last fiscal year, $2,551.40.

MIDDLE EAST PUBNICO.

Middle East Pubnico, Yarmouth county, is a thrifty settlement of some 400 to 500 people, engaged in fishing and farming, situated on the east side of Pubnico harbour, 32 miles southeast from the town of Yarmouth.

In 1904-5, the sum of $3,531.67 was expended in constructing a public wharf of pile-work, 250 feet long, 25 feet wide, with an 'L' on the outer end, giving a face length of 50 feet and a height of 16 feet. At H.W.O.S.T., the face of the work carries a depth of about 13 feet of water.

In 1907-8, the sum of $300 was expended in sheathing the outer face of the wharf, 55 feet in length, with 5-inch plank, to protect the piles against running ice, and in driving 15 new fender piles along the outer face and north side, to replace those broken by ice last winter.

Spring tides rise about 14 feet.

MIDDLE RIVER (LOWER).

Middle River, Victoria county, is a large stream emptying into Indian bay, on the northern side of St. Patrick's channel, an arm of the Bras d'Or lakes.

About five miles from its mouth, the river flows through alluvial lands, which are easily acted upon by the strong currents, particularly during freshets, and in consequence, the river was continually forming new channels, causing the loss of much valuable land.

During 1903-4-5, a shear dam, 600 feet in length and 16 feet wide, and composed of pile-work, filled in with brush and stone, was constructed by the department, to close the newly formed channel, and to divert the course of the river into an old and straighter channel; the improvement, as far as it was carried out, proved effective.

A change in the course of the river, above the dam, which threatened to cut a new channel behind the dam, by isolating it, necessitating the construction, during 1906-7, of a short shear-dam, 150 feet in length, above the original dam, to close the new channel and to throw the current back into the old channel.

During the flood, in December, 1906, the course of the river, above the works, was again changed, and the upper or small dam was cut off from the land and isolated, causing the river to run between the two dams; the sum of $6,200 was voted for 1907-8 for the extension of the works.

Of the amount voted, owing to the scarcity of labour during haying and harvesting season, up to November 30, the sum of $5,489.62 was expended as follows:—

For the extension of the original dam, down stream, a distance of 442 feet, with pile, brush and stonework, 10 feet wide, sheathed with plank on the channel face, and

for replacing some stone on the channel side of the lower end of the original dam; for repairing the upper dam and for its extension up stream a distance of 220 feet, and for the construction of a third dam, across the channel, above the old work intended to overlap the second dam, 600 feet in length, and 15 feet wide, and built of piles, brush and stone, with a view to shear the current back into its old channel.

MIDDLE RIVER (UPPER).

Upper Middle River, Victoria county, is a settlement on the Middle river, a large stream emptying into Indian bay, on the northern side of St. Patrick's channel, an arm of the Bras d'Or lakes, and is situated about 11 miles from and above the mouth of the river.

The sum of $2,100 was voted for 1907-8 for the construction of a shear-dam, to deflect and to straighten the course of the river at a point where it threatened to leave the old one, and to cut a new channel through valuable intervale lands.

Of the amount voted, the sum of $2,089.79 was expended in the construction of a dam 400 feet in length; the inner 100 feet consisting of brush and stone, and the outer 300 feet, of three rows of pile-work 15 feet wide, filled in solidly with brush and stone and sheathed on the channel face with 3-inch plank.

The work will have to be extended a further distance of about 50 feet, to fully meet its requirements.

MODESTY COVE.

Modesty Cove, Halifax county, is a small but well protected cove on the east side of St. Margaret's bay, about nine miles from its head and eighteen miles in an air line, W.S.W., from Halifax. The cove is used by a number of fishing boats owned in the locality and neighbourhood. The population of the place comprises about 100 people, chiefly engaged in fishing.

In 1907-8, the sum of $398.60 was expended in removing rocks and boulders from the entrance to the cove.

Spring tides rise 6 feet; neaps 5 feet.

MOOSE HARBOUR.

Moose Harbour is a small fishing settlement of about 125 people, situated about three and a half miles southwest of the town of Liverpool. The fishermen there, have, through the filling up of a small cove, been compelled to operate their boats from Western Head, about three miles distant, and in consequence were much hampered in pursuing their calling.

A vote of $1,200 was granted at the last session of parliament for the erection of a breakwater along a reef situated on the outside of the harbour.

The work done, during the last fiscal year, is 80 feet long, 14 feet wide on top and has an average height of 8 feet, or approximately 381 cubic yards, of stone and cement, making the cost per yard about $3.17; it is similar in style and class of material to that of the Western Head breakwater.

Spring tides rise here 6 feet, neaps 5 feet.

MORDEN.

Morden, Kings county, formerly called French Cross, is a small fishing and farming village of about 150 people, situated on the south shore of the Bay of Fundy, fifty miles northeast of Digby Gut and nine miles north from Aylesford station on the Dominion Atlantic Railway.

The pier or breakwater, which is the most westerly in Kings county, was begun in 1846, at the joint expense of the inhabitants and the provincial government. It is built of round-log cribwork, filled with ballast, close-sheathed on the seaward side

and outer end. It is about 365 feet in length, and varies in width from 28 feet at the shore end to 45 feet at the outer end, where it is 26 feet in height. It has had many repairs, renewals and extensions, complete details of which are contained in annual report of 1904-5.

In 1907-8, the sum of $100 was expended in again removing the accumulation of gravel from alongside the breakwater.

MORRIS ISLAND.

Morris island, Yarmouth county, is situated twelve miles in an air line E.S.E. from the town of Yarmouth. It is four miles long north and south, with a maximum width of three-quarters of a mile. The population of the island is about 100 people, engaged in fishing and farming.

In 1907-8, the department expended the sum of $599.88 in digging a channel 390 feet long, 10 to 15 feet wide and from 2 to 5 feet deep, through an isthmus about a mile from the south end of the island, to facilitate boat communication between the waters to the east and west of the island.

NEIL'S HARBOUR.

Neil's Harbour, Victoria county, is situated on the eastern coast of Cape Breton island, about midway between Ingonish and Aspy bays.

The harbour is at the entrance of a small bay, open to the south and south-east and extending inland about half a mile. It is sheltered from the north and east by Neil's Head (a rocky promontory from 10 to 20 feet above the level of high water springs), but not safe during gales from the south and southeast.

It is a large and important fishing station; for the purpose of affording protection to the anchorage during southeasterly gales and a landing place for small vessels, in 1901-2-3, a breakwater, extending to 17 feet at low water, was constructed off the southern end of Neil's Head, and connected with the public road by a road, 79 feet long and 20 feet wide, cut through the bank. The breakwater, excepting the inner end, for a distance of 44 feet, which is of round native timber cribwork, consists of close-faced squared timber work, 20 feet wide for a distance of 114 feet from the inner end, 24 feet wide for a further distance of 80, and 56 feet wide for the remaining 32 feet. The work is very strongly constructed, is filled in solid with ballast and is close-sheathed on the seaward faces, the outer end and on the inner face for a distance of 112 feet from the outer end. The substructure is of creosoted timber and the seaward side is protected by a stone talus.

During the fiscal year ended June 30, 1905, the sum of $952.79 was expended in the removal of rocks and boulders off the beach inside the breakwater, which interfered with the landing of boats, and in placing the stone removed on the seaward side of the breakwater.

During the fiscal year ended June 30, 1906, the sum of $1,189.44 was expended in raising the talus, by placing 729 cubic yards of very heavy stone on it.

During an extremely severe southeast gale, in December, 1905, the work was subjected to a terrific sea, which carried a large amount of the stone in the talus over the breakwater, and dropped it along its inner face, although the stones weighed from 1 to 3 tons each.

The stone was deposited over an area of 96 feet in length, and 12 feet wide, and to a depth averaging 4 feet, and, as it prevented the inner face of the breakwater from being used for landing purposes, during 1907-8, the sum of $998.88 was expended in the removal, by divers, of the stone deposited along the inner face, which amounted to about 170 cubic yards, and placing it again in the talus.

Spring tides rise 4 feet.

NEW GLASGOW.

New Glasgow, Pictou county, is an important manufacturing town and business centre on the eastern extension of the Intercolonial Railway, and at the head of tide in the East river of Pictou.

A contract, in the sum of $3,990, was entered into on March 12, 1908, for the construction of a 200-foot cribwork extension of a wharf in New Glasgow, under the control of a harbour commission.

Amount expended during last fiscal year, $115.73, exclusive of dredging which amounted to $3,166.40.

NEW HARBOUR.

New Harbour, Guysborough county, is on the southern or Atlantic coast of Nova Scotia, thirty miles to the westward of Canso harbour. It is merely a shallow bay, open to the southeast ,at the head of which is the entrance of St. Catherine's river, navigable for boats five miles inland.

A contract, entered into in May, 1900, for the construction of a breakwater at Black Point, on the western side of the bay, was completed September 27, 1900.

The breakwater consisted of a stone embankment, 160 feet in length and 7 feet in average height, between the shore and 'Black Rock'; of a stone embankment, 89 feet in length and 18 feet in average height, in extension of 'Black Rock'; and of 150 feet of cribwork 25 feet in width, with creosoted substructure and a talus on the seaward side sloping 1½ to 1 from high water. The height of the cribwork, over 15 feet of its width on the seaward side, is 7 feet and, over 10 feet of its width on the inner side, 3 feet 4 inches, above extreme high water. The depth, at extreme low water, at the inner and outer ends of the cribwork are respectively 6 feet and 16½ feet. Spring tides rise 6 feet.

In October, 1900, the outer section of the stone embankment was nearly destroyed, the cribwork was slightly damaged and most of the stone in the talus on the seaward side of the cribwork was carried away.

During the years 1901-2-3-4-5, the sum of $10,434.55 was expended in repairing and strengthening the cribwork, in constructing a concrete wall 89 feet in length, 12 feet in width on top, and 10 feet in average height, over the remains of the outer embankment, and a concrete wall 75 feet in length, 8 feet in width and 4 feet in average height over 'Black Rock,' in reconstructing about 30 feet of the outer end of the inner stone embankment and in placing a talus of heavy stones (5 to 8 tons each), on the seaward side of the outer concrete wall and cribwork extension.

In 1906-7, the sum of $907.27 was expended in repairing the stone embankment between the shore and 'Black Rock,' in placing additional stone in the talus on the seaward side of the cribwork extension and in sorting and piling, at West Arichat, the creosoted timber required in the construction of a proposed 24 by 24-foot block, to be placed in 12 feet at low water against the inner face of the cribwork extension.

During the fiscal year 1907-8, the sum of $1,299.16 was expended in completing repairs to the seaward face of the breakwater and in procuring the creosoted and native timber and other materials required and constructing the 24 by 24-foot block undertaken in 1906-7.

NORTH RIVER (DAM).

North River, St. Ann's, Victoria county, enters the northern side of St. Ann's harbour, which is on the northeastern coast of Cape Breton island.

The mouth of the river is an inlet of the harbour; it is wide with a good depth of water, and the tide runs up the river about two miles, where the river becomes narrow and is crossed by a highway bridge.

During the fiscal year ended March 31, 1908, a dam 550 feet in length and 10 feet wide, and consisting of pile, brush and stone work, close-sheathed on the channel face,

was constructed at a point about ½ mile above the highway bridge, to prevent the river, during freshets, from leaving its natural bed and cutting a new channel through valuable intervale land.

The expenditure amounted to $2,395.30.

NORTH RIVER (WHARF).

North River, Victoria county, empties into the northern arm of St. Ann's harbour, on the eastern coast of Cape Breton Island.

A wharf was constructed by the department during 1898-9-1900, at Seymour's Point, on the northern side of the mouth of North river. It extends to 9 feet at low water and consists of a road approach, 64 feet long and 16 feet wide, of a block and span work, 63 feet long and 20 feet wide, and of a creosoted timber pile-extension, 175 feet long and 20 feet wide, with a return of 20 feet at its outer end.

As the top of the wharf was, in places, in a dangerous condition and not safe for traffic, during the fiscal year ended March 31, 1908, the sum of $40.01 was expended in the renewal of floor-stringers and covering, where most necessary.

NYANZA.

Nyanza, Victoria county, is a small settlement, distant seven miles to the westward of Baddeck, and is situated on Indian bay, on the northern side of St. Patrick's channel, an arm of the Bras d'Or lakes.

It is a port of call for the steamers of the Bras d'Or Steam Navigation Co., plying between the Sydneys and Whycocomagh during the season, and is the shipping place for a large and important agricultural district.

The wharf, constructed by the department during 1893-4-5 and widened during 1901-2, is 136 feet in length and 40 feet wide; it extends to 12 feet at low water, and is constructed of brush, with sides battering 1 in 6, covered with gravel and fendered with hardwood piles.

During 1902-3, a warehouse, 30 by 18 feet, was constructed on the western side of the inner end of the wharf, and during 1905-6, a parcel of land, containing about half an acre, was purchased for the purpose of forming a yard for cattle, sheep, &c., while waiting for shipment.

During the fiscal year ended March 31, 1908, the sum of $426.44 was expended in replacing the hardwood fender-piles at the outer end and corners of the wharf (12 in number) with creosoted timber piles, in securing the outer corners of the wharf, and in repairs to the covering and cap-timbers.

OYSTER POND.

Oyster Pond, Guysboro county, is one of several large ponds on the north shore of Chedabucto bay, which form the only boat harbours between Cape Argos, on the western side of the southern entrance to the Strait of Canso, and Guysboro Harbour, a distance of 15 miles.

In 1876, the entrance to the pond was improved by hand dredging and protected on its eastern side by the construction of a breakwater 180 feet in length. In 1884-5, the breakwater was extended 105 feet over a level bottom, dry at extreme low water. The width of the inner work is 14 feet, while the extension is 16 feet wide. In 1896-7 the breakwater was strengthened and repaired. Since 1885, the beach on the western side was gradually worn away, down to about half tide level, and the sand and gravel of which it was composed was carried into the pond, decreasing the depth over the anchorage from 18 to 6 feet at low water.

A contract was entered into in 1897-8, for the construction of a beach protection work on the western side, 400 feet in length, 12 feet in width, over 360 feet from the inner end, 16 feet in width over the outer 40 feet, and 8 feet in height, the top being four feet above extreme high water, was completed in 1898-9.

In 1904-5, the sum of $449.69 was expended in constructing a 'spur' 40 feet in length, 16 feet in width and 8 feet in height at the outer end of the beach protection works on the west side of the entrance.

The depth at extreme low water, over the bar obstructing the entrance to the pond, in 1905, was 1 foot 6 inches. Spring tides rise 6 feet.

Of the $1,700 appropriated for expenditure during 1907-8 in extending the breakwater on the eastern side of the entrance and in dredging, the sum of $45 was expended in procuring part of the materials required in the construction of a proposed 100-foot extension to the eastern breakwater.

PARKER'S COVE.

Parker's Cove, Annapolis county, is a small indentation on the southeast shore of the Bay of Fundy, 15 miles northwest of Digby Gut, and seven miles north of Annapolis, the county town. The population of the settlement is about 250 people engaged in fishing and farming.

In 1883-4, the department constructed a small cribwork breakwater, 200 feet long, 23½ feet to 26 feet wide on top, and at the outer end 16 feet high, where at high tide there is a depth of about 11 feet of water.

In 1900-1, the department extended the breakwater a distance of 101 feet, at a cost of $3,749.

In 1903-4, the breakwater was extended a further length of 130 feet, with an 'L' on the outer end, having a face length of 82 feet. This work, which was built by contract, at a cost of $10,212.60, is from 20 to 29 feet high; the stem being 26 feet wide and the 'L' 30 feet wide on top. The landward side batters 1 in 6, while the eastward side is plumb and provided with a solid timber break, 4 feet 9 inches high.

In 1903-4, the sum of $1,191.10 was expended in rebuilding the upper 2 to 4 feet in height, by 25 feet in width, of the shoreward end (the older portion of the breakwater), and in protecting the foreshore on the eastern side of the work with large stone to prevent the sea from undermining the new block.

In 1905-6, a contract was awarded in the sum of $7,100, for a further extension of the breakwater.

In 1907-8, the extension was completed and an additional sum of $144.25 was expended in removing blocks from vicinity of end of breakwater. Total expenditure in 1907-8, $1,826.75.

Spring tides rise about 30 feet.

PARRSBORO.

Parrsboro is a town of nearly three thousand people, situated on the Cumberland Basin, about twenty miles from the town of Springhill. About thirty-five millions of lumber is annually shipped from this port, whilst it is also the shipping port for the Cumberland Coal and Railway Company, whose annual output is now approaching 500,000 tons of coal. Besides this, it is surrounded by quite a large tract of farming land, the produce of which forms a considerable item.

Owing to the changed conditions of shipping generally, requiring deeper and larger draught vessels, the depth of water in this port was not sufficient to accommodate these altered conditions. The depth of water at H.W.O.S.T. was sixteen feet, whilst at low water the harbour was and is completely dry. To obtain the necessary conditions, Mr. Shewan, resident engineer at St. John, N.B., made the requisite survey and a contract was executed in June, 1906, for the dredging of a channel 2,100 feet in length, 100 feet wide, and which upon its completion would increase the depth of water to 21 feet at H.W.O.S.T. The contractor for this work was Mr. Hugh MacDonald, of Sydney, and the amount of his contract was $27,950

During the fiscal year 1906-7, about 15,000 cubic yards of spoil was excavated.

During the last fiscal year the balance of the contract, with the exception of a portion of the work which was decided to be abandoned, was completed in a satisfactory manner. The contract called for the excavation of this channel commencing at the Cumberland Coal and Railway Company's wharf, also for the excavation of a basin, located along the inner side of said wharf, which basin was to be 200 feet wide, 250 feet long, and have a depth ranging from 3½ to 5 feet.

It was, later on, thought not advisable to excavate the basin, but to bring the channel to no less than 40 feet from the head of the wharf.

Expenditure, $10,583.87.

PEREAUX.

Pereaux, King's county, is a rich and prosperous agricultural district, with a population of some 300 to 400 people, situated on the west side of the basin of Minas, three miles north of Kingsport, and five miles south of Cape Blomidon. From Kingsport to Cape Blomidon is a thickly settled and fertile agricultural district.

In the fiscal year 1901-2, the sum of $661.99 was expended in the partial construction of a pile wharf for the purpose of shipping fruit, farm produce, &c., and the landing of coal and general merchandise. It was satisfactorily completed in the year 1902-3, at an expenditure of $1,329.96. The wharf was a pile structure, 180 feet long, 25 feet wide, and, at the outer end, 20 feet high, where, at high water, there is a depth of 17 feet.

During the winter of 1904-5, the severest on record in the maritime provinces, the whole structure became a mass of solid ice, which, in a series of exceptionally high tides, lifted many of the piles and destroyed the whole structure to such an extent as to render it practically useless.

In 1906-7, the sum of $2,796.99 was expended in rebuilding the structure in block and span work. At the close of the fiscal year, the new work was not quite completed.

In 1907-8, the sum of $860.21 was expended in continuing the construction of the wharf, which, at the close of the fiscal year, was not quite completed.

Spring tides rise over 40 feet.

PETITE RIVIERE.

Petite Rivière, Lunenburg county, is the centre of a thriving farming and lumbering district, situated about 12 miles southwest of the town of Bridgewater, and six miles west of the mouth of La Have river. The village, which has a population of about 500 people, is situated at the mouth of a small river, from which it takes its name. The nearest railway station is distant six miles, and the nearest harbour, at La Have, six miles distant.

A small harbour is formed by the channel of the river, which empties into a shallow bay through a sand beach. This channel is navigable for large row-boats at high tide only, and the residents experience great difficulty in getting their supplies, which are discharged from schooners anchored in the bay.

During the fiscal year 1905-6, the department expended the sum of $3,999.83 in purchasing material for the construction of a breakwater on the western side of the harbour, to prevent the accumulation of sand in the harbour, and to act as shear-dam in confining the current of the river to a narrow channel in order to create a scour and remove the sand at the entrance of the harbour.

In 1906-7, the sum of $5,681.56 was expended in the construction of the work. It is 1,220 feet long, the first 900 feet 16 feet wide and the outer 320 feet, 20 feet wide. It is from 5 to 13 feet high and rests upon mattresses of brush, from 20 to 30 feet in width and about 2 feet in thickness.

In 1907-8, the sum of $1,824.95 was expended in completing the work and in repairing a breach made in its shore end by a serious storm.

Spring tides rise 6 feet; neaps, 5 feet.

PHINNEY COVE.

Phinney Cove, Annapolis county, is a very slight indentation in the general coast line on the south side of the Bay of Fundy, nine miles east of Parker's Cove and three miles west of Hampton. The population of the place, within a radius of a mile and a half, is about 150 people, making, roughly speaking, two-thirds of their living by fishing and one-third by farming. The lack of shelter for the fishing fleet, comprising about 25 boats, being a great drawback to the development of the industry, the department in 1907-8, built a breakwater by contract. The work is 200 feet long, 27 feet wide, and from 9 feet high at the shore end, to 23 feet at the outer end, where, at high water, there is about 20 feet of water. The work is substantially built of native timber cribwork, well fendered, bolted and fully ballasted.

Expenditure during 1907-8, $4,493.23.

Spring tides rise about 30 feet.

PICTOU ISLAND.

Pictou Island is situated in the Strait of Northumberland, about ten miles northeast of the entrance of Pictou harbour.

There are two wharfs on the south side of the island, one near the west end and one, known as the 'east wharf,' near the centre. The west wharf is 324 feet in length and 20 feet in width (with the exception of the inner 55 feet which is 12 feet wide) and had an 'L' on the east side at the outer end which measured 20 by 30 feet previous to its enlargement in 1902-3. The east wharf, prior to 1906, was 328 feet in length and 20 feet in width. The depths at extreme low water, at the outer ends of the east and west wharfs, were respectively 4 feet 6 inches and 4 feet 9 inches. Spring tides rise 6 feet.

In 1901-2, the sum of $609.60 was expended in repairing the east wharf. In 1902-3 the sum of $942.56 was expended in repairing and strengthening the west wharf and in constructing a 30 by 30-foot block at the outer end of the 'L.' In 1905-6, the sum of $172.30 was expended in repairing the east and west wharfs.

During the fiscal year 1907-8, the sum of $318.69 was expended in reconstructing and repairing part of the outer end of the west wharf.

PLYMPTON.

Plympton, Digby county, is a fishing and farming village of 200 or 300 people, situated on the east shore and near the head of St. Mary's bay, twelve miles southwest from Digby, and eight miles northeast of Weymouth.

Some years before confederation, the provincial government built a wharf of cribwork, 230 feet long, 35 feet wide, and, at the outer end, 22 feet high, giving, at H.W.O.S.T., a depth of 19 feet of water.

In 1874-5, the department extended the work by a block, 34 feet square, and made some necessary repairs to the rest of the work.

In 1900-1, extensive repairs were made, at an expenditure of $1,200.

In 1904-5, the sum of $1,000 was expended in extending the wharf by the construction of a new block, 35 feet long, 35 feet wide and 22 feet high.

In 1905-6, the department expended the sum of $2,500 in completing the extension begun in 1904-5, and in constructing a further extension, 65 feet long, from 20 to 34½ feet wide and 19 feet high.

In 1907-8, the sum of $600 was expended in building a freight shed on the breakwater, for the convenience of local shippers and merchants.

This work was transferred to the control of the Department of Marine and Fisheries on June 12, 1888.

Spring tides rise 22 feet; neaps, 18 feet.

POIRIERVILLE.

Poirierville, Richmond county, commonly known as Lower D'Escousse, is a district on the northeastern coast of Madame island, on the southern side of the eastern entrance to Lennox Passage, a strait separating the island from Cape Breton Island.

On September 19, 1906, a contract was entered into, in the sum of $7,575, for the construction of a public wharf, but owing to delay in the delivery of the creosoted timber required, the work of construction was not commenced until September 24, 1907.

The work under contract is 340 feet in length and 20 feet wide, extending to 10 feet at low water, with an 'L' on the southern side of the outer end, 20 by 20 feet; it consists of cribwork blocks and spans, the blocks being constructed of round timber, with creosoted timber substructure; and as a protection against ice, the faces of the outer block, and the seaward faces and outer ends of the two blocks next to the end block are to be close-sheathed.

The work was continued up to November 30, 1907, when it was stopped for the season; on that date the blocks were all constructed up to the required height and fully ballasted, and about one-half of the floor-stringers were placed on the blocks and spans; leaving the laying of the balance of the stringers, the covering and cap-timbers, and the placing of upper fenders and sheathing still to be done.

The expenditure during the last fiscal year was $6,088.05.

POMQUET RIVER.

Pomquet River, Antigonish county, is a large stream, emptying into Pomquet harbour, on the southern shore of St. George's bay. The sum of $600 was authorized for expenditure during 1907-8 for the protection of the intervale lands through which the river flows, as much damage had been caused by the erosion of its banks.

Out of the amount authorized, up to March 31, 1908, the sum of $414.50 was expended in the construction of a brush and stone dam, 60 feet long and 8 feet wide on top, with sides battering 1 in 4 and of an average height of 7 feet, at a point just below the junction of the Pomquet and Black rivers. In addition to the construction of the dam, brush and stone work has been built along the face of the bank just above the dam, for a distance of 80 feet, to protect it from damage by the heavy ice in the spring.

PORTER'S LAKE.

Porter's lake, Halifax county, is a long narrow strip of fresh water, lying nearly north and south and situated about the middle of Halifax county, or about 15 miles east of the provincial capital. It is about 18 miles in length, from a quarter to a half mile wide, and the water being of good depth for almost its entire length, it is navigable for vessels of 60 tons to its extreme head. The normal level of the lake is some 2 or 3 inches above H.W.O.S.T.

Up to about 1873, the outlet, which is directly into the Atlantic through a gravel beach about 200 feet wide, was navigable for schooners drawing 6 feet of water, and a considerable trade was then done on the lake in the export of timber, lumber, cordwood, farm produce and fish. Since that time, the outlet has been gradually and permanently filling up with accumulations of gravel, washed in by southerly and easterly storms. In order to maintain the outlet, to prevent the road along the margin of the

lake from being flooded, and to admit fish into the lake, the following small expenditures have been made by the department:—

1881-1882	$200 00
1884-1885	200 00
1889-1890	200 00
1892-1893	147 00
1897-1898	100 00
1898-1899	200 00
1899-1900	150 00
1902-1903	49 99
1903-1904	300 15
1904-1905	160 40
1905-1906	61 18
1906-1907	38 71
1907-1908	223 71
	$2,031 14

These expenditures having resulted in but slight temporary relief and no permanent improvement, the department, in 1900-1, expended the sum of $8,262.44 in beginning the construction of a permanent channel through the neck of land 2,400 feet wide, separating the main body of the lake from the extreme head of Three Fathom harbour. In 1901-2 a further sum of $5,987.24 was expended on the permanent outlet. In 1902-3, the sum of $2,455.67 was expended on the permanent, and $49.99 on the temporary (old) outlet.

In 1904-5, the sum of $4,248.67 was expended on the permanent or new outlet.

In 1905-6, the sum of $968.68 was expended on the permanent outlet, and $61.18 on the temporary outlet.

In 1906-7, the sum of $38.71 was expended on reopening the temporary outlet.

During the year 1905-6 the sum of $199.92 was expended in beginning a new outlet at Graham's Head.

In 1907-8, the sum of $223.71 was expended in, from time to time, reopening the old outlet, which fills with sand and gravel after every easterly blow.

PORT GEORGE.

Port George, Annapolis county, is a village of some 400 people, situated on the south shore of the Bay of Fundy, 37 miles northeast of Digby Gut, 41 miles southwest of Scott's Bay, nine miles southwest from Margaretville, and seven miles northwest from Middleton, on the Dominion Atlantic Railway.

Some years before confederation, the provincial government built a western breakwater and an eastern pier or wharf. The breakwater is 440 feet long, from 25 to 35 feet wide on top, and, at the outer end, where there is about 21 feet of water at H.W.O.S.T., it is about 25 feet high.

It is built of round-log crib, stone-filled cribwork, the western or seaward face and outer end being close-sheathed.

The wharf, on the eastern side of the little harbour, is 205 feet long, 20 feet wide and 18 feet high at the outer end. It is built of round-log cribwork, and the outer end, on which is built a small lighthouse, is close-sheathed. In 1874 the harbour was taken in charge by this department, and in that and the following year, the sum of $7,000 was expended in repairing and refacing the breakwater, which was much decayed.

Large expenditures have since been made for repairs and improvements, details of which may be found in annual report of 1904-5.

In 1907-8, the sum of $3,050.68 was expended in taking down and rebuilding a portion of the shore end of breakwater, which was very old and delapidated. The new piece is 50 feet long, 31 feet wide and from 14 to 16½ feet high.

This work was transferred to the control of the Marine and Fisheries Department on June 12, 1888.

Spring tides rise 30 feet.

PORT HAWKESBURY.

Port Hawkesbury, Inverness county, is on the eastern side of the Strait of Canso, nearly opposite Port Mulgrave.

In 1902-3, 1903-4 and 1904-5, a wharf known as the 'long wharf,' was acquired and reconstructed. In 1904-5, a warehouse was constructed on the outer end of the wharf, and an old warehouse near its inner end was repaired and improved for the sum of $1,979. In 1905-6, the sum of $249.77 was expended in repairing and strengthening the retaining wall of the approach to the wharf and in moving and improving the old warehouse.

During the fiscal year 1907-8, the sum of $295.14 was expended in placing a flooring in the warehouse, at the outer end of the wharf, over covering of wharf; in repairing and strengthening the horizontal fenders at the outer end and the sheathing at the outer corners of the wharf, and in constructing a gangway at the inner side of the 'head' of the wharf.

PORT HILFORD.

Port Hilford, Guysborough county, is at the head of Indian bay on the southern or Atlantic coast of Nova Scotia, five miles to the eastward of the mouth of St. Mary's river.

A contract entered into in September, 1899, for the construction of a breakwater 300 feet in length and 22 feet in width, with an 'L' of 22 feet on the north side at the outer end, was completed in September, 1900.

Some settlement of the seaward side of the work having been caused by scour during a gale on August 14, 1900, an agreement was entered into with the contractors for placing 200 cubic yards of compressed brush and 440 cubic yards of stone on the seaward side and at the outer end to prevent further scouring. This extra work, involving an expenditure of $920, was commenced on October 3 and completed on November 14. While the extra work was in progress, a further and very serious settllement took place, during a gale on October 10.

In 1901-2, the sum of $2,724.05 was expended in raising the work to its original height.

During the fiscal year 1907-8, the sum of $6,326.56 was expended in removing the stones and boulders at the outer end; in procuring all the creosoted timber required for close-piling as originally intended; in close-piling 135 feet of the seaward face from the outer end inward, the inner end and back of the 'L,' and 80 feet of the inner face from the 'L' inwards, and in placing quarried stone on the seaward side to protect the piling which could not be driven as far as was originally intended.

PORT HOOD HARBOUR.

The harbour of Port Hood is on the east coast of Cape Breton Island, about twenty miles to the northward of the northern entrance to the Strait of Canso.

The harbour was formerly a secure one; Smith island, which forms its west side, having been connected with the mainland by a beach of sand. In 1839, the sea made a breach through the beach; the opening, at first narrow, was enlarged by the tidal currents with increasing rapidity until it was entirely swept away. The harbour is now unsafe during northerly gales, except in a small cove on the east side of Smith island.

In March, 1902, a report was submitted on the closing of the northern entrance, in which the estimated cost of work suggested varied from $482,000 to 291,000, according to design and location.

The amount appropriated for 1903-4 ($20,000), was for expenditure by day labour, in constructing a portion of a breakwater of brush and stone with stone talus and covering. Operations were commenced in May and were in progress at the close of the fiscal year ended June 30, when the expenditure amounted to $2,968.85. This sum was expended in procuring materials and in constructing a work of brush and stone 28 feet in width on top, at high water level, extending from the mainland 330 feet to 3 feet at extreme low water.

In 1904-5, the sum of $19,942.43 was expended in extending the brush and stone work 470 feet (800 feet from the mainland), to 6 feet at extreme low water, and in placing a talus on both sides, and a covering of quarried stone.

Of the amount appropriated for 1905-6, the sum of $9,999.91 was expended as follows: $2,984 in March and April in procuring materials, and the balance in July, August and September in extending the brush and stone work 188 feet (988 feet from the inner end), to 9½ feet at extreme low water, and in placing a talus on both sides, and a covering of quarried stone.

During the fiscal period of nine months ended March 31, 1907, the sum of $15,000.38 was expended in June, July and August in extending the brush and stone work 309 feet, 988 to 1,297 feet from the inner end; of the 309 feet, the inner 60 feet was completed up to 2 feet above high water and protected with quarried stone on each side and on top, 191 feet was up to within 1½ feet of low water with quarried stone on the seaward side, and 58 feet of the outer brush and stonework was up to 5 feet below low water. There was also expended in August, September and October, the additional sum of $1,814.77 in placing quarried stone over the 249 feet of work left unprotected.

Of the $15,000 appropriated for 1907-8 the sum of $14,999.37 was expended, $1,814.77 in payment of over-expenditure in 1906-7, and the balance, in completing the 249 feet of work left unfinished in 1906-7; in procuring quarried stone for work in 1908-9, and in purchasing a donkey engine and some timber to be used in the construction of derricks.

The top of this stone covering is now about 2 feet above high water from end to end of the work.

PORT HOOD WHARF.

Port Hood, the shire town of Inverness county, is on the west coast of Cape Breton Island, 20 miles north of the northern entrance to the Strait of Canso.

A pier on the east side of the harbour, commenced by the provincial government in 1865, was originally 550 feet in length and 24 feet in width, with an 'L' on the south side of the outer end 100 feet in length and 25 feet in width. It came under the charge of the federal government in 1871, since which time extensive repairs and renewals have been made including the construction of a new block, 125 by 25 feet, at the outer end in 1873, the construction of a block, 50 by 32 feet, at the south end of the 'L' in 1888-9; and the construction of a block, 71 by 24 feet, at the outer end in 1889-90. The old provincial government work was of square timber close-faced; the additions and parts reconstructed by the department are of round timber laid open-faced. The pier has been protected on the seaward side, at the outer end, on the south end and inner side of the 'L' by close-piling, and on both sides, to within 74 feet of the outer end, by a stone talus.

In 1905-6, the sum of $600 was expended in renewing the floor-stringers and covering near the inner end and in renewing close-piling and ballast at the outer end.

In 1906-7, the sum of $1,500 was expended in raising, repairing and close-piling the outer end of the wharf, in placing quarried stone in the talus on the seaward side and in general repairs to the seaward face.

During the fiscal year 1907-8, the sum of $1,999.91 was expended in renewing close-piling, ballast and covering of portions of outer end and in placing about 74 cubic yards of quarried stone in the talus, on the seaward side near the outer end.

PORT MAITLAND.

Port Maitland, Yarmouth county, is a prosperous and important fishing and farming village, with a population of about 600 people, situated on the southeast side of the mouth of the Bay of Fundy, twelve miles north of the county town of Yarmouth.

The harbour works were begun about the year 1859, by the provincial government, they consist of an eastern and western or main breakwater of cribwork. The former is 400 feet long by some 20 feet wide ,and the latter 500 feet long, 22 to 25 feet wide, with a return of 54 feet long, 24 feet wide and 27 feet high, along which there is a depth of 19 feet at H.W.O.S.T. These breakwaters or piers inclose between them a snug high water harbour of two and a quarter acres in extent.

In 1873-4, this department extended and raised the eastern breakwater, and has since maintained and improved the works. Details of expenditures incurred and works done may be found in annual report of 1904-5.

In 1907-8, the sum of $199.61 was expended in replacing a small quantity of close-sheathing, which was torn off by the ice the previous winter; in repairing a breach on the seaward side of the north wharf, and in replacing some covering on the south of the main breakwater.

This work was transferred to the control of the Department of Marine and Fisheries on June 22, 1885.

Spring tides rise 18 feet; neaps, 15 feet.

PORT ROYAL.

Port Royal, Richmond county, is a settlement on the western side of Madame Island, about 2½ miles to the northward of West Arichat, and on the northern side of the eastern end of Leblanc harbour.

On March 23,1908, a contract was entered into, in the sum of $4,775, for the construction of a wharf at this place.

The work under contract will extend to 8 feet at low water, or 14 feet at high water, and is to be a block and span structure, 177 feet long and 18 feet wide, with an 'L' on the eastern side of the outer end, 18 by 18 feet, and shall consist of an approach of stone and clay, 37 long; of three cribwork blocks, 18 feet long, and of an outer block, 18 by 36 feet, with openings between them, 17 feet long. The blocks are to be constructed of round timber, laid open-faced, with creosoted timber substructure, properly ballasted, fendered and covered, and the three outer faces of the outer block are to be close-sheathed between the fenders.

Up to the end of the last fiscal year, the sum of $428.45 had been expended on this work.

PORTUGUESE COVE.

Portuguese Cove is a small fishing village with a population of about 600 people, situated six miles east from Halifax, on the western side of the mouth of the harbour.

In the fiscal year 1901-2, the department expended the sum of $199.88 in laying some boat skids to enable the fishermen to haul their boats up on to the beach in stress of weather. The skids consist of four lines, about 70 feet long, of spruce logs, securely bolted to the solid rock, about 10 feet apart, laid at right angles to high water mark and with smaller logs or poles, bolted to them at intervals of about 5 feet.

In 1907-8, the sum of $397.92 was expended in removing rocks and boulders from the channel entrance of the little harbour.

Spring tides rise 6 feet; neaps, 5 feet.

RABBIT ISLAND.

Rabbit Island, Richmond county, is on the northern side of the western entrance into Lennox Passage, and on the eastern side of the entrance to Inhabitants bay.

The island, being near the fishing grounds, is an important fishing station; for the purpose of affording the fishing boats better and safe protection during gales, and to permit of larger boats being used in the fisheries, the sum of $4,000 was voted for expenditure during 1907-8 for the construction of a small breakwater, but beyond obtaining the necessary timber, nothing was done up to March 31, 1908, and of the amount voted the sum of $863.89 only was expended.

The proposed breakwater is to be 180 feet in length and 20 feet wide, extending to 8 feet of water, and is to consist of round, native timber cribwork, fully ballasted and close-sheathed on the seaward face and end.

RED HEAD.

Red Head, Shelburne county, is situated about two miles west of Roseway and 12 miles southwest of Shelburne.

During the year 1899-1900, the sum of $2,100 was expended in opening up a channel and constructing two cribwork protection groynes, which, in the year 1903-4, were extended 60 feet at a cost of $400.

During the last fiscal year, an additional sum of $557.79 was expended in further extending the work 40 feet, adding 2 feet to the top height over the whole work, and cleaning out the channel for about 150 feet of its length.

Spring tides rise here 7 feet; neaps, 5½.

RIVER HEBERT.

The amount of $300 was granted for the completion of the pile wharf at this place, but owing to the fact that a suitable foreman could not be obtained, this work was not completed this year. We procured the material necessary for its completion. and it is hoped to have the work completed by the middle of June, 1908.

Expenditure in 1907-8, $165.68.

ROCKLAND.

Rockland is situated about three miles east of the town of Lockeport, and the people living in that vicinity are principally engaged in fishing. The population is abouto 200.

In the year 1898-9, the sum of $2,500 was expended in constructing a combined breakwater wharf, which consisted of an approach, 21 feet long and 24 feet wide on top; of a cribwork stem, 181 feet long and 20 feet wide on top, and an 'L'-shaped head, 25 feet long and 40 feet wide, constructed of cribwork. This wharf when constructed, had a depth of water at its head, at L.W.O.S.T. of 8 feet. Owing to its solid front, sand was swept in and gradually filled up the beds around the wharf. During the last few years, the Halifax and South Western Railway was constructed along this shore, and the town of Lockeport, placed a ferry service between the railway station and the town of Rockland; and in order to furnish them with accommodations in connection with the train service, it was necessary to extend this wharf.

During the last fiscal year, the sum of $1,000 was expended to that effect. This extension is 100 feet in length and 20 feet wide, with a depth of water of 8 feet, at L.W.O.S.T. at its head. It was constructed with the usual pile trestle bents, situated 10 feet apart, centre to centre of pile heads.

Spring tides rise here 6½ feet; neaps, 5 feet.

ROUND HILL.

Round Hill, Annapolis county, is a thickly settled and very prosperous farming district, situated about eight miles east of the town of Annapolis. There is a station on the Dominion Atlantic Railway; the village, with a population of about 500 people, is situated from a quarter to half a mile to the south of the Annapolis river, which is navigable at high water for large vessels up as far as Bridgetown, some seven miles farther up.

Some thirty years ago, a small wharf of cribwork was built by private enterprise, but it fell into disuse some fifteen years ago. At the present time, all that remains of it consists of a few logs and a little pile of ballast.

For the benefit of local trade, the department, in 1905-6, expended the sum of $2,000.14 in the construction of a public wharf. It consists of a pile-work stem, 76 feet long by 25 feet wide, from 5 to 16 feet high, terminating in a substantial block of stone-filled cribwork, 75 feet long, 35 feet wide, and from 16 to 22 feet high, founded on piles driven to hard bottom and cut off level with the mud. Along the face of the wharf, at high water, there is about 16 feet of water.

In 1906-7, the sum of $1,997.41 was expended in continuing the construction of the wharf.

In 1907-8, the sum of $1,095 was expended in continuing the work, which, at the close of the fiscal year, was not quite completed.

Spring tides rise about 30 feet.

SALMON RIVER.

A small stream called the Salmon river, Digby county, empties into the Bay of Fundy, 17 miles north of Yarmouth, 30 miles south of Weymouth, 3½ miles north of the boundary line between the counties of Digby and Yarmouth, and 4½ miles north of Port Maitland, in the latter county.

The population of the settlement, within a mile either way of the river's mouth, comprises about 500 people, engaged in farming, lumbering, fishing and general trade. The river, though not large, drains a number of large lakes, and is the most important stream in the southern part of Digby county. It empties into the Bay of Fundy through a sand and gravel bar, inside of which there is a sheltered pond, which, with the exception of the bed of the stream, is dry at low water. The pond has been formed into a small tidal harbour by the construction of two separate works, one on either side of the river's mouth.

The southern work, which is the more important, stops the gravel from interfering with the free discharge of the river, and acts as a breakwater and loading wharf for vessels.

The northern work is simply a groyne or gravel pier, built to prevent the undertow from bringing the gravel into the mouth of the river from the north beach, and by confining the outflow, gives a better chance to scour.

Both these works were built by the provincial government and private enterprise.

The first expenditure by this department in connection with these works, was in 1874, since which date large sums have been expended to maintain and improve the harbour. (For details see annual report of 1900-1).

In 1907-8, the sum of $4,000 was expended in:—

(*a*) Extending the north or main breakwater by a new block, 70 feet long, 25 feet wide and 18 feet high, the inner half of it being built on piles driven to hard bottom and cut off level with the sand.

(*b*) Extending the north breakwater shorewards by a new block, 40 feet long, 10 feet wide and 7 feet high.

(*c*) In raising the shore end of the main breakwater a height of 2 feet to bring it to the level of the new extension.

(*d*) In close-piling a length of 84 feet on the north side of the main breakwater, along the face of the stream which issues alongside the work.

Spring tides rise about 18 feet; neaps, 15 feet.

This work was transferred to the control of the Department of Marine and Fisheries on June 12, 1888.

SANDFORD.

Sandford, Yarmouth county (Cranberry Head), is situated on the Atlantic coast of Nova Scotia, at the extreme western point of Yarmouth county, 7 miles northwest from the town of Yarmouth. The settlement in the neighbourhood, which has for some years been known as Sandford, has a population of from 300 to 400 people engaged in fishing and farming.

In 1858, a breakwater was begun by the inhabitants, aided by the provincial government. In 1876, the sum of $2,000 was expended by the department in extending the work 150 feet. In 1878-9, the sum of $1,000.08 was spent in constructing an additional length of 50 feet and in repairing the older portion.

In 1880, and since, this department has incurred large expenditures in maintaining and improving the works. (For details see annual report of 1905-6).

In 1907-8, the sum of $200 was expended in sheathing and fendering a space of about 30 feet in length on the seaward face of the breakwater, which could not be done when the work was built in 1902-3, owing to portion of an ancient block abutting the new work. The old block has so far been demolished by the sea as to make the sheathing possible.

SAULNIERVILLE

Saulnierville, Digby county, with a population of about 350 people, is situated on the northeast coast of St. Mary's bay, Bay of Fundy, thirty-six miles southeast of Digby, thirty-two miles north of Yarmouth and three miles north of Meteghan river.

Some years before confederation, a breakwater, serving also as a landing wharf, was built by the inhabitants, aided by the provincial government. In 1876, the sum of $4,000, of which half was contributed by the department and half by the inhabitants, was expended in making thorough repairs to the work and extending it to a further length of 100 feet.

The works have been several times since repaired and improved; for details see annual report of 1904-5.

In 1907-8, the sum of $2,500 was expended in extending the breakwater by a substantial block of cribwork, 32 feet long, 35 feet wide and from 22 to 24 feet high.

Spring tides rise 21 feet; neaps, 18 feet.

At low water, the sand flats are bare for several hundred feet beyond the end of the work.

SCOTCH COVE (WHITE POINT).

Scotch Cove, Victoria county, forms the southeastern part of Aspey bay, on the northeastern side of Cape Breton Island, and is about three-quarters of a mile south from White Point, which is on the southern side of the entrance to the bay.

On March 18, 1908, a contract was entered into with Messrs. Reid & Archibald, in the sum of $28,935, for the construction of a breakwater for the protection of fishing boats and small craft, on the eastern side of the cove.

The proposed breakwater is 320 feet long, and is to extend to 19 feet at low water; with the exception of the inner end, for a distance of 40 feet, which is to be of stone, 16 feet wide on top, it will consist of cribwork, with creosoted timber substructure, 20 feet wide for a distance of 80 feet, 24 feet wide for a further distance of 80 feet and 30 feet wide for the remaining distance of 120 feet. The faces of the cribwork

are to be constructed of squared timber, laid open-faced, with ties of round timber, and the work is to be solidly ballasted. The seaward face, the outer end and the inner face, for a distance of 30 feet from the outer end, will be close-sheathed, and a brush mattress, loaded with stone, is to be placed along its seaward face, for a distance of 200 feet from the outer end, inwards.

Expenditure during last fiscal year, $216.38.

SIGHT POINT.

Sight Point, Inverness county, is on the west coast of Cape Breton Island, seven miles to the northward of the entrance to Mabou harbour.

In 1900-1, the sum of $500 was expended in constructing a cribwork block, 24 feet in length and 17 feet in width on top, in from 2½ to 4 feet at low water, to form part of a small breakwater to shelter a landing place for boats, and in procuring some of the materials required for an extension outward 22 feet in length.

In 1901-2, the sum of $499.76 was expended in procuring the balance of the material required and in completing the 22 foot extension; in completing the sheathing of the 24-foot block and in constructing a rough work 24 feet in length, between the inner block and the shore.

During the fiscal year 1907-8, the sum of $899.97 was expended in repairing and strengthening the breakwater and in constructing a 28-foot extension.

SKINNER'S COVE.

Skinner's Cove, Pictou county, is on the western side of Northumberland strait, about four miles east of Cape John, and about 20 miles northwest of the entrance to Pictou harbour. A pond at the head of the cove is separated from the waters of the strait by a beach of sand 250 feet in width.

A contract entered into on January 5, 1905, for the opening of a channel through the beach and for the construction of protection works for the sum of $10,950 was completed, together with some extra work costing $927.41, on August 1, 1906.

The works under contract included the excavation of a channel 15 feet in width at bottom, and 425 feet in length, to a depth of 2½ feet at low water, and the construction of piers of brush, stone and piles, 304 feet in length and 15 feet in width, on each side, and of a cribwork block, 40 feet in length and 20 feet in width, with creosoted substructure, in extension, outwards, of each pier. The extra work included the extension of the piers some 40 feet on each side of the channel, and the placing of additional close-sheathing for a length of 144 feet on the seaward side and at the inner end of the western pier. Spring tides rise 7 feet.

During the fiscal year 1907-8 the sum of $822.37 was expended in constructing brush and stonework in extension of the piers on each side of the channel. The extensions, 78 feet in length on the west side and 68 feet in length on the east side, are 14 feet in width on top and 8 feet in height, founded in trenches excavated to 3 feet above the level of extreme low water.

SOUTH LAKE, LAKEVILLE.

South Lake, Lakeville, Antigonish county, is situated on the western side of St. George's bay, about midway between the entrance to Antigonish harbour and Cape George.

It is a large sheet of fresh water, fed by two streams, and is about one mile in length and one-sixth of a mile in width, with a good depth of water; it is separated from the bay by a beach of sand and gravel, about 900 feet in length, 300 feet in width, and about 8 feet above the level of high water springs.

The sum of $8,000 was voted during 1907-8 for the purpose of opening the lake as a boat harbour; it is proposed to cut a channel, 40 feet wide at the bottom to 2 feet

at low water, through the beach, and to protect the northern side of its entrance by a breakwater, 300 feet in length and 20 feet wide, consisting of round timber crib-work, creosoted to half tide, and protected on the seaward face and end by close-sheathing.

Out of the amount voted, up to March 31, 1908, the sum of $5,871.18 was expended in procuring the whole of the materials required for the construction of the breakwater, but, owing to the late delivery of the creosoted timber, construction could not be commenced during the year.

SPRY BAY.

Spry Bay, Halifax county, is a thriving fishing and farming settlement of about 1,000 inhabitants, situated about 70 miles east of the city of Halifax, and eight miles west of Sheet Harbour.

The harbour is free from ice all the year round. Hitherto, owing to the absence of a suitable landing pier, the weekly steamer has been obliged to tie up at a flimsy and inconvenient landing, and which is approached with difficulty.

In 1903-4, the sum of $507.94 was expended in the purchase and delivery of timber for the construction of a suitable wharf.

In 1904-5, the sum of $1,500 was expended in completing the wharf. The structure is of pile-work, 200 feet long by 25 feet wide, having an 'L' on the outer end, giving a face length of 55 feet and a depth of water, at L.W.O.S.T., of 11 feet.

In 1907-8, the sum of $269.42 was expended in filling, with stone and brush, a breach, made in the previous winter by sea and ice, in the approach to the wharf.

Spring tides rise 6 feet; neaps, 5 feet.

ST. MARY'S RIVER.

St. Mary's river, Guysboro county, is a fine stream, 65 miles in length, traversing valuable timber lands and discharging into the Atlantic ocean, about 48 miles to the westward of Cape Canso. The depth, at extreme low water, in a channel dredged through a bar at the entrance in 1900-1, is about 14 feet and thence, in a narrow and tortuous channel to within a half mile of the village of Sherbrooke, which is at the head of the tide, 8 miles inland, from 18 to 12 feet. Spring tides rise 6 feet.

During the fiscal year 1907-8, the sum of $495.47 was expended in improving the channel by removing part of a reef just within the entrance, and some boulders, near the head of navigation.

SYDNEY QUARANTINE STATION.

The quarantine station in Sydney harbour is on the southern arm near Keating Point, and about three-quarters of a mile from Point Edward at the eastern extremity of land lying between the south and west arms.

A wharf, built by the Department of Marine and Fisheries, and repaired and extended in 1892-3, consisted in a block and span structure, extending 148 feet to 8 feet at low water.

The wharf having fallen into such a delapidated condition as to render its reconstruction and extension inadvisable, the sum of $4,318.15 was expended in 1903-4, 1904-5 and 1905-6, in constructing a new block and span wharf with creosoted substructure, extending 173 feet to 10½ feet at low or 15½ feet at high water, and consisting of an inner and 4 intermediate blocks, 14 feet in width, and an outer block, 20 feet in line of work by 40 feet.

In 1906-7, the sum of $249.19 was expended in procuring the timber required for raising the inner end of the inner block and for close-fendering the outer end of the wharf.

During the fiscal year 1907-8, the sum of $149.65 was expended in completing the improvements to the wharf undertaken in 1906-7.

TANGIER.

Tangier, Halifax county, is a thriving settlement with a scattered population of some five or six hundred people, situated at the head of Tangier harbour, 60 miles east of Halifax. In the neighbourhood are extensixe gold areas, famous for having produced the largest nugget (27 oz.) ever found in Nova Scotia.

In the year 1907-8, the sum of $2,080.89 was expended in the construction of a block and span wharf. The work was not completed at the close of the fiscal year.

Spring tides rise 6 feet; neaps, 5 feet.

TATAMAGOUCHE BAY.

Tatamagouche Bay, Colchester county, is a farming settlement, with a population of about 20 families, situated on the west side of a deep inlet of Northumberland straits, about eight miles from Tatamagouche village.

In 1907-8, the department, out of an appropriation of $1,000 for the construction of a public wharf, expended the sum of $533.01 in bridging a small creek between the public road and the beach, and in constructing the approach to the site of the wharf; work was then discontinued and the construction of the wharf itself not begun.

TIVERTON.

Tiverton, Digby county, is a village of some 400 people, mostly engaged in fishing, but doing also some little farming; it is situated on the west side of Petit Passage, separating the mainland of Digby Neck from Long Island. It is about thirty miles southwest of Digby town and ten miles from Sandy Cove.

On February 12, 1903, a contract in the sum of $17,000 was awarded by the department for the construction of a breakwater, to afford shelter to the fishing fleet. This work, which was completed in January, 1904, is 281 feet long, 30 feet wide on top, and, at the outer end, 33 feet high, where at H.W.O.S.T., there is about 29 feet of water. The whole structure is substantially built of round log cribwork, the lower portion up to 5 feet above L.W.O.S.T., being of creosoted timber, to resist the attacks of the limnoria.

In 1907-8, the sum of $599.62 was expended in bolting on new hardwood fenders and guard timber on the south or shoreward side of the breakwater, with a view to enable the steamers to lie alongside more conveniently. A freight shed, 26 feet by 15 feet, was also built on the breakwater, for the convenience of local merchants and shippers.

Spring tides rise about 21 feet.

TONEY RIVER.

Toney river, Pictou county, is a small stream emptying into the Northumberland strait about midway between Pictou Harbour and Amet Sound.

During the years 1905-6 and 1906-7, the sum of $5,312.85 was expended in opening a new channel through a beach obstructing the entrance and in constructing protection works. The protection works, constructed on the east and west sides, were respectively 206 and 146 feet in length and 14 feet in width, excepting the outer 32 feet on each side which were 20 feet in width. The piers are 35 feet apart and are each 10 feet in height from 1½ feet below to 8½ feet above extreme low water. The depth, at extreme low water, in the channel between the piers and outside for a distance of about 50 feet was 1½ feet. Spring tides rise 6 feet.

After the completion of the protection works in 1906-7, the sum of $972.72 was expended out of the appropriation for that year, in procuring most of the materials required for proposed 40-foot extension of the protection works.

During the fiscal year 1907-8, the sum of $758.05 was expended in constructing the 40-foot extension.

TRACADIE.

Tracadie harbour, Antigonish county, is on the southern shore of St. George's bay, 11 miles west from the northern entrance to the Strait of Canso.

The works here consist of a breakwater on the eastern side of the entrance of the harbour and of a breastwork in extension of the breakwater inward and along the beach to the southward of it, to prevent scouring and undermining of the bank by tidal currents.

The breakwater extends a distance of 120 feet out to the edge of the channel, thence along the line of channel outwards, a distance of 100 feet. The latter section is constructed on the remains of old work, and is 16 feet wide for a distance of 64 feet, and 20 feet wide for a distance of 36 feet; it is constructed of round timber with creosoted timber substructure.

During the fiscal year ended June 30, 1906, the sum of $1,199.57 was expended in the reconstruction of the outer 36 feet of the breakwater, which had been wrecked during a gale and afterwards carried away down to low water. The new work, to a height for 3 feet from the bottom, was constructed with round creosoted timber, and the upper portion with round native timber.

During the fiscal period of nine months ended March 31, 1907, the sum of $449.97 was expended in repairs to the breakwater, including the levelling up of the inner 64 feet of the outer section, the renewal of some covering and fenders and reballasting, where required.

The sum of $699.96 was expended during 1907-8, in the construction of a cribwork retaining wall, 60 feet long, 12 feet wide and averaging 8 feet in height, at the foot of the bank, to the eastward from the inner end of the breakwater, to prevent the sea from cutting into the bank. The cribwork was filled in solidly with stone, its seaward face and end were close-sheathed and the top covered with spruce spars.

VICTORIA.

Victoria, King's county, is situated at the mouth of Church Vault Brook, on the south shore of the Bay of Fundy, 52 miles northwest of Digby Gut and halfway between Morden and Ogilvie's wharf, from each of which it is distinct about four miles.

The breakwater, which also serves as a landing and loading pier, was begun in 1864, and finished in 1867, at the joint expense of the inhabitants and the provincial government. It is 243 feet long, 27½ feet wide at the outer end and 24 feet in height at its outer end.

In 1878, the work was repaired and raised 4 feet.

Repairs were also made in 1891, 1893, 1900-1, 1902-3 and 1904-5.

In 1907-8, the sum of $179.50 was expended in filling, with cribwork and ballast, a small breach, about 15 feet long, in the seaward face of the breakwater, and in the renewal of a small quantity of close sheathing and floor planking.

WALLACE.

Wallace is a scattering settlement, or village, situated on Wallace bay, which bay runs inland a distance of eleven miles from Malagash Point. The people, who number about 1,000, are engaged in farming, fishing and quarrying.

The village of Wallace is situated on the south side of this bay, whilst on the north side of said bay the settlements of North Wallace, Fox Harbour and Gulf Shore are located.

Prior to confederation, the Nova Scotia government constructed a small wharf on the north side of this harbour for landing purposes; this wharf had been repaired several times since by this department.

In the year 1897, the department constructed another wharf on the south side of the harbour. A steam ferry was established between these two wharfs, and a channel from the heads of these wharfs to the main harbour channel was dredged out, so that ferriage between the two sides of the harbour could be conducted at all times of tide. This dredging soon filled up and in the year 1905 we began operations, having in view the extension of both of these wharfs to the main harbour channel. In the fiscal year 1905-6, we expended $10,193.82; in 1904-5, about $4,850; in 1906-7, $2,500; and during the last fiscal year, $1,447.47, upon this work.

The wharf on the north side was extended a distance of 1,440 feet, 1,420 feet of which consists of pile trestle bents, situated 10 feet apart, with a common width of 16 feet on top; the last 20 feet is 40 feet wide on top, and is constructed of round log, stone-filled cribwork.

The south wharf was extended a distance of 223 feet, being 20 feet wide on top, and 14 feet high at the outer end. This extension is constructed of continuous round log, stone-filled cribwork, well fastened and fendered. Solid cribwork was used in this extension, because it was located in the position of the old dredging, which cut had completely filled up with a soft mud or silt, which material would not support pile-work, and indeed so soft did it prove that the cribwork settled in it from 4 to 6 feet.

Of the amount expended last year, about $450 was paid out to meet an over-expenditure of the previous year. The remaining $1,000 was expended in constructing a ferry slip, 60 feet in length, 12 feet wide, and a protecting pier 35 feet in length, 8 feet wide and 14 feet high, which latter work was built of regular cribwork. Some of the planking of the old work was renewed, out of this amount.

Total expenditure in 1907-8, $1,447.47.

WEST ARICHAT BREAKWATER.

West Arichat, Richmond county, is a small but safe harbour on the west coast of Isle Madame, sheltered from the south and west by Creighton island and by a breakwater between it and Isle Madame.

The breakwater is 1,211 feet in length and 24 feet in width, of round timber, open-faced and fully ballasted. The top of the covering is 11 feet above the bottom which dries at low water, except near a 25-foot opening 588 feet from the west end.

In 1904-5 and 1905-6, the sum of $1,486.46 was expended in renewing the floor-stringers and covering in places and in repairs on each side of the opening, including repairing and strengthening the work on the west side and reconstructing a portion of the work on the east side.

In 1906-7, the sum of $254.27 was expended in procuring the materials required for renewing the floor-stringers of 308 feet of the breakwater and for renewing the close-fendering in places, and in placing all the materials, except 45 floor-stringers and 10 fenders.

During the fiscal year 1907-8, the sum of $100.24 was expended in completing the renewal of floor-stringers and covering in progress in 1906-7.

WEST ARICHAT WHARF.

West Arichat, Richmond county, is a large settlement on the south side of Madame island, about three miles to the westward of the town of Arichat.

The harbour is easy of access and perfectly safe, being sheltered from the south and west by Creighton island and by a breakwater between the island and the mainland.

On August 28, 1905, a contract, in the sum of $5,275, was entered into for the construction of a wharf at Bodset point, on the northern side of the entrance to the harbour.

The work of construction was commenced early in June, 1906, and, by the end of the month, the cribwork approach had been done.

The work was resumed in May, 1907, and was finally completed in the following month of August; it consists of a block and span wharf, 88 feet in length and 20 feet wide, extending to 15 feet at low water, with an 'L' on the eastern side of the outer end, 28 feet long and 24 feet wide; and of a cribwork approach, 300 feet long and 16 feet wide, to connect the wharf with the public road. The blocks in the wharf are built of round timber, with creosoted timber substructure, properly ballasted and fendered, and the outer faces of the outer block are close-sheathed between the fenders.

The expenditure during the last fiscal year was $2,232.29.

WEST DOVER.

West Dover, Halifax county, is a small but well sheltered harbour and fishing station, with a population of about 100 people, engaged wholly in fishing; it is situated on the east side of the mouth of St. Margaret's bay.

In 1907-8, the sum of $100 was expended in removing rocks and boulders from the cove.

WEST HEAD.

This headland is the most western point on Cape Sable island, and is situated about two miles from Clarke's Harbour. It is at the southwestern end of Barringon passage, and is an important fishing section of this island. Owing to its situation it would prove to be the most convenient and easiest point of approach for the coasting steamers which require the use of the several small ports of call on this island. As it lies, however, in such an exposed position, it was necessary to construct a wharf, which not only would accommodate the shipping, but would also be a breakwater, and thus adequately protect whatever shipping or boats that might be loading or lying along its sides. The department, during the fall of 1906, began the construction of a breakwater at this place, continued during the summer of 1907, during which latter period the sum of $5,000 was expended.

The proposed work, when completed, will consist of a rock bank approach, 95 feet in length, 24 feet wide on top, and 10 feet high at the outer end, and a wharf proper, which latter will be 210 feet in length, 20 feet wide on top, with the exception of the last 40 feet, which will be 50 feet wide on top. The work, with the exception of the approach, is being constructed of continuous cribwork of the usual style. There will be from 13 to 15 feet of water, at the outer end, at L.W.O.S.T.

Spring tides rise here 11 feet, and neaps, 8½.

WEST PUBNICO.

West Pubnico, Yarmouth county, is situated thirty miles southwest of Yarmouth; it is about eight miles long from mouth to head, lying due north and south, and from three-quarters to a mile and a half wide.

On the west side of the harbour and about three miles above its mouth, a wharf was built by the department in 1885-6-7. The work consists of a stone and gravel causeway, 285 feet long, followed by a wharf, 230 feet long, of pile bents. The bank is 25 feet wide, by an average height of 5 feet; the wharf is of the same width and from 10 to 14 feet high. At L.W.O.S.T., the mud flats are bare for over 1,000 feet beyond the end of the wharf.

In 1900-1 the sum of $2,025 was expended in repairs and extensions.

In 1903-4 the sum of $98.12 was expended in repairs.

In 1905-6, the department expended the sum of $1,198.83 in rebuilding 135 feet in length of the shore end of the wharf.

In 1907-8, the department expended the sum of $700 in digging by hand, a channel from the end of the public wharf to the main channel, 787 feet long, 14 feet wide and from 1 foot to 2 feet deep.

The total length of pilework is now 397 feet.

Spring tides rise about 14 feet.

WHITEHEAD.

Whitehead, Guysborough county, is a fishing settlement on the western side of White Haven, one of the finest harbours on the southern or Atlantic coast of Nova Scotia, situated about fourteen miles to the westward of Canso Harbour.

During 1904-5-6, a public wharf, 168 feet long, and extending to 16 feet at low water was constructed here by the department, and a warehouse, 18 by 30 feet, was built on a separate foundation, on the southern side of the inner end of the wharf.

The wharf is a block and span structure, 20 feet wide, and consists of a stone abutment, 60 feet long; of two central blocks, each 20 feet in length, and of an outer block, forming a T head, 20 feet in line of work and 60 feet in length, with intervening spans between the abutment and the blocks. The blocks are built entirely with native timber.

During the fiscal year ended March 31, 1908, the sum of $147.35 was expended in the construction of a small freight shed, 18 by 20 feet, on the southern end of the T head.

WHYCOCOMAGH.

Whycocomagh, Inverness county, is a village on the north side of a bay of the same name at the head of St. Patrick's channel, an arm of the Bras d'Or lake.

A private wharf at this place was purchased, with a warehouse and right-of-way to the public road, in 1897-8, and repaired and extended in 1898-9 and 1899-1900. It is 228 feet long, including 144 feet of stone work, 21 feet wide, and 84 feet of pilework, (25 feet wide over 59 feet of its length and 60 feet wide over the outer 24 feet), built over the remains of an old block and span structure. The depth at the outer end is 12½ feet at low, or 13½ feet at high lake level.

In 1902-3, the sum of $450 was expended in repairing the sides and ends of the outer 50 feet of the approach and in blocking up and repairing the floor of the warehouse.

In 1904-5, the sum of $499.98 was expended in completing repairs to the wharf, undertaken in 1902-3, in renewing the covering of the outer end or 'head,' in raising the approach and in repairing the warehouse.

During the fiscal year 1907-8, the sum of $300.46 was expended in renewing 12 bearing and fender piles and 1,500 feet B.M. of covering and in repairing the stone approach.

WINDSOR.

Windsor, the county town of Hants, with a population of about 4,500, is an important town situated at the head of the estuary of the River Avon, on the Dominion Atlantic Railway, forty-six miles northwest of Halifax. In the neighbourhood, are extensive quarries of gypsum. Some two or three million feet of lumber, B.M., are annually exported by water. Up to about 1890, the wharfs of the town were comparatively free from mud, and, at high water, large vessels could lie alongside and discharge or load. In the last few years, owing partly to the construction of the new highway bridge, the mud has accumulated in front of the wharfs to such an extent, that it is only at extreme high tide that moderate-sized vessels can approach or leave the wharfs.

With the object of scouring away the accumulated mud, the department, in 1897-8, began the construction of a training weir, extending down-stream from the corner of the Falmouth abutment of the road bridge, at an angle of 45 degrees with the

bridge. The weir is constructed of brush mattresses at the bottom, with sufficient stone to keep them in place, and with cribwork on top of them. The thickness of the brush mattresses, with their load of stone, is from 2 to 4 feet; the average depth of the main or under-crib is from 5 to 8 feet, and the uniform height of the 'A'-shaped top crib is 7 feet; the sloping sides of the work are sheathed with 3-inch hardwood plank, and the crest is covered with 6 by 6 by $\frac{3}{4}$ steel angle, securely bolted. The work is built on shifting quicksands, and, owing to the great rise and fall of the tides (about 40 feet) and the great velocity of the current at ebb and flood tide, it was constructed under great and peculiar difficulties.

In the fiscal year ending June 30, 1901, the sum of $2,173.74 was expended in completing the work to its originally designed length of 600 feet.

In the fiscal year ending June 30, 1902, the department expended the sum of $2,725.93 in extending the work a further distance of 100 feet and in making repairs.

In 1903-4, the sum of $98.71 was expended in replacing a small quantity of hardwood sheathing on the outer end of the work that was torn off by ice in the previous winter.

In 1904-5, the sum of $53.07 was expended in replacing some more of the hardwood sheathing of the training weir that was torn off by the ice in the previous winter.

Some time between the years 1854-1860 the provincial government of Nova Scitia built a wharf of cribwork as an adjunct to the railway from Halifax to Windsor, then called the Nova Scotia Railway. Since confederation, at which time the railway passed to the ownership and control of the federal government, the wharf has been maintained by the Department of Railways.

In the fiscal year 1907-8, this department expended the sum of $6,174.07 (including $2,680 paid to the Department of Railways for hauling earth by train for filling) in rebuilding the upper 5 feet in height of the wharf. The new work is 250 feet long by 30 feet in width. To render the landward approach to the wharf more convenient, an area of about half an acre of low ground, at the back of the work, was filled with earth and gravel to the level of the floor of the wharf.

Spring tides rise about 40 feet; neaps, 36 feet.

YARMOUTH BAR.

In 1876, it was found that part of the beach between Cape Forchu and Stony Point, was gradually wearing down, and unless the action was arrested, the sea would eventually sweep away the beach and destroy the harbour. The government of Nova Scotia began the work of protecting the beach in 1867, constructing 200 feet of cribwork at Stony Point; between 1873 and 1875, the Public Works Department constructed the remaining 2,800 feet of protection work to reach Cape Forchu, and added buttresses or groynes to stop the movement of the gravel.

Between 1875 and 1878, the protection works, badly built of stone-filled cribwork and close-piled on their seaward faces, had to be repaired and strengthened, the expenditure amounting to over $25,000.

Between 1888 and 1896, no further works of repair were undertaken on the beach protection, and it became delapidated and decayed. Breaches were made through it by seas in various places. During the year 1896-7, the sum of $2,983.62 was expended in carrying on the most urgent works of repair, and yearly since, expenditures have been incurred to maintain and improve the protection works, details of which may be found in annual report of 1905-6.

In the year 1907-8, the sum of $5,047.01 was expended in extensive renewals and repairs to the beach protection. Two sections, respectively 45 and 20 feet in length, were taken down and rebuilt from the bottom; four other sections, aggregating 190 feet in length, were taken down for half the width of the work and rebuilt. A small

groyne, 12 feet long, 18 feet wide and about 10 feet high, was built at about the middle length of the work, for the purpose of retaining the gravel. Other general repairs were made.

Spring tides rise 12 feet; neaps, 10 feet.

YARMOUTH HARBOUR.

Yarmouth, the county town of Yarmouth county, is situated at the southwestern extremity of Nova Scotia. It is a thriving and prosperous town of nearly 7,000 inhabitants, and, next to Halifax, the largest and most important town in that province. It is the terminus of the Dominion Atlantic Railway whose fine Clyde built steamers make regular trips throughout the year to Boston. There are several important factories in the place, but the leading business is shipping, of which a larger tonnage is owned here than in almost any other locality in Canada.

At low water, Yarmouth harbour, in which spring tides rise 16 feet, neaps 13 feet, consists largely of mud flats covered with eel grass. The harbour is protected by a succession of shingle or gravel beaches (called Stanwood Beaches) aggregating about one mile in length and which connect the northern end of Forchu island, also about one mile long, with the southern end of Stony Point on the main land, and separate the harbour from the Bay of Fundy.

The channel, from the town wharfs to the mouth of the harbour, is about two and a half miles long, from 300 to 500 feet wide, and carries a depth of water, at H.W.O.S.T., of 14 to 17 feet.

In the year 1907-8, the sum of $5,692.14 was expended in removing from the channel a considerable quantity of boulders and loose stone, which had been a serious menace to steamers entering or leaving the port. The work was done by means of a small wrecking steamer and a small wrecking sloop with the aid also of divers. Out of the total expenditure on this work, $800, or 16 days at $50 per day, was expended in assisting the department dredge *Fielding*, working there at the time, in placing and shifting moorings.

PRINCE EDWARD ISLAND.

BAY FORTUNE.

Bay Fortune harbour, Kings county, is situated on the east coast of the island, about five miles southwest from Souris, the eastern terminus of the Prince Edward Island Railway, and about fifteen miles northeast of the entrance of Georgetown harbour, at the mouth of the Bay Fortune river, about two miles below the head of its navigation, and Bay Fortune village.

Sand beaches extend out on either side of the river's mouth, to near the edge of the channel; the beach, on the south side, is 300 feet long, and that on the north side about a quarter of a mile; at the outer ends of each of these beaches small wharfs, leaving the width of the river between the two, 180 feet, were constructed many years ago by the provincial government. Approach to the wharfs, however, was found to be poor; while there is from 8 to 10 feet of water along the sides and ends of them at L.W. spring tides; a bar off the mouth of the river, about 1,500 feet away, had at some stage of tide on it only about 3 feet, so making the extreme draught of vessels approachable, even at H.W. spring tides, only 7 feet; the rise of spring tides at the place is 4 feet.

To improve conditions, some of the residents of the district assisted by the provincial government, many years ago, commenced the construction of a breakwater, extending along the beach on the eastern side of the channel, starting at a point about

50 feet from the eastern end of the cribwork approach to the north pier, and extending onward, in a southeasterly direction, a distance of 400 feet; its object was to direct, confine and increase the current at ebb tide, and thus maintain by scouring a better channel over the 'bar,' and so permit of larger vessels entering. The work was, however, found to be too short to prove effective and having become much out of repair, its extension, repair, and connecting its inner end with the wharf, on the point of the beach, was effected in 1892-3, by the department, making in all a work 850 feet long with width of from 12 to 20 feet. Considerable benefit has resulted from the extension; the depth of water over the bar now is two feet better than formerly.

During 1904-5, a stone, pole and brush protection work was found necessary along part of the beach, for a length of 500 feet, northerly from the inner end of the breakwater, where danger existed of a new channel being formed.

Some washout and settlement having occurred in this work, its repair was effected during last summer, at a cost of $249.76; the work done consisted of making up, with brush, stone, and poles placed in alternate layers, all of the low places.

BELFAST.

Belfast pier, Queen's county, locally known as 'Halliday's wharf,' is situated on the south side of Orwell bay, about one mile from the village of Eldon.

This pier, constructed by the government of Prince Edward Island previous to confederation, and which was taken over by the federal government in 1883, besides affording shipping facilities for the neighbourhood, is also the port of call for a passenger steamer plying tri-weekly between Charlottetown and ports on Orwell bay, &c. It has a length of 600 feet with return or 'L,' 145 feet in length. The inner 440 feet has a width of about 27 feet; the outer 160 feet and the 'L' are from 30 to 32 feet wide. The 'L' or pier-head now carries on its inner and outer sides, as well as on the eastern end, a depth of 8 feet at low water spring tides, or of 17 feet at high water. Dredging had been done to that depth by the department during the summer of 1903, affording a good approach to the pier and a safe berth for vessels on the inner side of the return.

During the past fall, the sum of $1,002.60 has been expended in repair and strengthening of pier-head and making up roadway of shore approach, where washout and settlement had occurred. The work done on pier-head was the rebuilding for 5 feet in height of a length of 50 feet of face at and below low water where timber had been destroyed through age, ravages of 'teredo' and action of ice; replacing ballast where this had been washed out; putting in new floor-stringers, guard-timbers and planking where required, and fender-piling face and end at about 4 feet centres; one-third of piles used were of creosoted timber.

BELLE RIVER HARBOUR.

Belle River harbour, Queen's county, which is at the mouth of the river, is situated on the south side of the island, about four miles west from Wood islands, and six miles eastward of the mouth of Pinette river and harbour.

Previous to 1873, the creek or river, which is a stream of small extent, shallow, narrow and not navigable, had its entrance into the Strait of Northumberland by a channel to the southward of the present one, but about that date the inhabitants of the surrounding districts, being desirous of obtaining some facilities for shipping, made application to the local government for aid and obtaining a small grant, added to this by subscription and began improvements at the place, which consisted first of straightening the entrance and constructing protection works of poles, brush and stone on either side of the channel; these works were from time to time extended by grants from the local government and private subscription, and, in 1902, they were 310 feet long on the south side and 510 feet on the north side, the greater por-

tion of these, however, being of slight and indifferent construction, had by 1904 become much out of repair; in fact, only the outer 80 feet on the northern side and 100 feet on south side remained in order, and these also became damaged in 1906 and the destruction of the harbour threatened.

During last summer, repair of the works was effected, new finishing blocks being built at the outer ends at a cost of $2,178.99; the one on the south side is 40 feet long, and that on the north 70 feet long.

BLOOMING POINT POND.

Blooming Point pond, Queen's county, situated on the north coast of the island, about a mile from the east end of Tracadie harbour. The pond has in all a length of about one and one-half miles, averaging about one-quarter mile in width.

During the spring and summer months, gaspereaux and other fish usually visit it in large numbers for the purpose of spawning, entering it from Tracadie harbour by a narrow shallow channel, which at its mouth and in several parts of its course, as it passes through marsh and sand flats, has, at times, when heavy storms occur, become completely blocked, preventing the fish from passing in or out.

During the past year, 1907, an expenditure of $21 was made in clearing out and deepening channel.

BRAE HARBOUR.

Brae Harbour, Prince county, is situated on the northern side of Egmont bay, about eight miles east of West Point and six miles south of 'Coleman Station,' on line of the P. E. Island Railway, and at the mouth of the Brae river. The harbour is formed by the protection of Brae Island (about one and a half miles long) which, lying nearly parallel with the shore at a distance of from a quarter to a half a mile, gives complete shelter over a large area, and although much of this dries out at low water spring tides (which here rise 4 feet), the space available for fishing boats and small vessels (under 6 feet draught) to lie afloat at all times of the tide, while comparatively small, is quite ample for the accommodation of a large fleet, the place proving a most convenient fishing station as it would also a shipping point were it not for its approach being obstructed by a shifting sand bar, almost dry at low water, extending across the entrance, which is about 800 feet wide, at a distance of about a third of a mile from the shore and with which it is parallel. To improve the approach to the harbour, a small breakwater was built in 1890, extending 350 feet from the shore, in a southwesterly direction, for the purpose of contracting the entrance, thus causing an increased scour and so deepening the water.

The work was composed of brush, poles and stone with clay filling on top; to this the department, in 1892, added a length of 200 feet, and again in 1898-9, a further length of 94 feet; the latter length had a width of 24 feet, while the inner portion was from 18 to 20 feet wide.

All of the work having become very much out of order, its inner end particularly being of slight construction, provision was made in 1906, for having it raised, strengthened, &c., during that fall. Owing to delay in getting out the material and commencing the work, only a portion of it was done before winter, and as work could not be done afterwards before March 31, quite a large quantity of materials remained over on hand, as sufficient had been got out to do the entire work.

During the past season, the work has been fully completed at an additional cost of $656.47. The breakwater is now in good condition; its inner length of 575 feet has been raised from two to three feet, full ballasted, new fendered, &c., and the outer 94 foot block, ballasted, new floor-stringered, replanked and close fendered, piled on sides and outer end.

CAPE TRAVERSE.

Cape Traverse wharf, Prince county, is at about the centre of 'Traverse Cove,' which is situated on the south side of the island, about 14 miles east of the entrance to Summerside harbour. Its construction was commenced in 1869 by the provincial government, and in 1878, it extended 1,470 feet out in the cove and had a width of 24 feet.

During 1884-5, when constructing the Cape Traverse branch of the Prince Edward Island Railway, the Department of Railways and Canals assumed control of the wharf, and put all of the then existing work in good repair, besides extending it seaward a further distance of 300 feet, and protecting all of its exposed sides with a rip-rap face of stone, sloping 2 to 1, while on the wharf, a freight shed was built, tracks laid, &c., Some ten years ago the freight shed and tracks were removed and the wharf practically abandoned by the Railways Department, with the exception of an inner length of 350 feet, which, in 1903, was repaired to provide car space, &c.

As the wharf, since first constructed, has been much used by the fishing boats of the vicinity, of which there are some fifty at least, and that considerable freighting is done, it was desirable that some shipping and wharfage facilities be preserved at that place. This, during the past season, has been provided at an expenditure of $1,797.62, the work done consisting of the reconstruction of a length of 500 feet immediately outward of the portion of wharf repaired by the Department of Railways and Canals in 1903; on this a new face has been built on the channel side, fendered, &c., the top floor-stringered and planked for width of 12 feet, and the remaining 18 feet made up with brush, broken stone and gravel, so as to form a good roadway.

CHAPEL PIER.

Chapel pier, King's county, is on the south side of Grand river, about three miles from its entrance into Boughton bay, and nine miles from Cardigan station, on the line of the Prince Edward Island Railway.

The pier constructed by the local government, previous to confederation, was assumed by the Dominion government in 1884; it consisted at the time of a shore abutment or approach, 205 feet long, with a block and span at the outer end, and forming a total length of 249 feet, 22 feet wide.. The depth at the outer end was 7 feet at low water or 12 feet at high water spring tides. During 1899-1900, a length of 44 feet was added by the reconstruction of a former block and span, extending the work into a depth of 9 feet at low water. As it was found that the ice forming each winter in the openings between the 'blocks' was forcing them outward, it was deemed advisable, in 1902-3, to fill in the openings with close-laid poles, &c.

Settlement of from 1½ to 2 feet having occurred in these, and the roadway of the approach being somewhat out of order, owing to wash-outs by the storms in fall of 1906, general repairs became necessary to place the pier in fit condition for the fall traffic, all of which were effected during the past season, at a cost of $199.39; square timbers were put in and secured on the sides of what had been the former openings, and spaces between, filled with ballast, gravelled over on top; the roadway was made up with broken stone and gravel where required, and all defective planking replaced on pier-head.

CHINA POINT.

China point pier, Queen's county, is situated on the west side of Orwell river near its entrance into Orwell bay. Originally built by the local government, its control was assumed by the Dominion government in 1884. It has, in all, a length of 426 feet, consisting of shore abutment or approach, 140 feet long, six 'blocks' with intervening 'spans' and a pier-head, 37 feet wide, fronting 72 feet on the channel, where there is a depth of 15 feet at low water, or of 23 feet at high water, spring tides.

When assumed by the Dominion government, the pier, being a very old structure, was much out of repair, and, from time to time since, has required expenditures to keep it in passable condition for traffic, much of the work being about entirely reconstructed within the past ten years.

During the past season, the sum of $50 was expended in repairing the roadway on the approach, where wash-outs had occurred.

CLIFTON.

Clifton pier, Queen's county, is on the south side of the Southwest river, about two and a half miles from its entrance into New London harbour, and immediately below the public road bridge, crossing the river at this point.

The pier is 260 feet in length, 18 to 20 feet in width for a distance of 202 feet, and the remaining length, viz.: the pier-head, being 25 feet wide. It is constructed of alternate blocks of cribwork and sections of poles and brush work built to close openings left in the original structure; the roadway, out to the outer block or pier-head, is formed of clay filling, while that of the outer block of planks secured to floor stringers. The pier-head, which extends out to the edge of the channel, rests in 14 feet of water at low spring tides, or 18 feet at high water springs, affording good shipping facilities for the largest class of vessels that enter New London harbour.

During the past year the sum of $203.28 was expended in general repairs of the roadway approach, which was made up with broken stone and gravel; the pier-head was newly floor-stringered and replanked, and new guard-timbers put on and sides and end fender-piled.

CRANBERRY.

Cranberry wharf, Queen's county, is situated on the south side of the East or Hillsborough river, about 14 miles from Charlottetown. Originally built by the provincial government, many years before confederation, its control was assumed by the Dominion government in 1898; at which time the wharf was in such a bad condition, owing to age and neglect, as to be quite unserviceable. It was repaired and partly rebuilt in 1903.

During the past fall, repair of the roadway was effected with broken stone and gravel, where washouts and settlement had occurred. The expenditure on these repairs was $40.78.

GREEK RIVER.

Greek River pier, King's county, is situated on the eastern side of the island, near the mouth of the Greek river, where the latter enters the northern side of Murray harbour. It was built by the Government of Prince Edward Island many years before confederation, and consisted of shore abutment and approach, 146 feet long, 'span' 20 feet and outer 'block' or pier head, 24 feet long, making a total length of 190 feet, with width of 21 feet, and extending out to a depth of 5 feet at low water springs, or of 10 feet at high water spring tides, that here rise 5 feet.

For many years past, repair of the pier has been so neglected that it had latterly become unfit for traffic, and it was said to be too narrow, and the depth of water not sufficient to accommodate such vessels as otherwise would visit the place, the site being a most convenient one for the district.

To provide the desired shipping facilities, its repair and extension were effected by the department during last summer and fall at a cost of $1,998.06. The then existing work was thoroughly repaired and a new pier head, 25 feet long by 30 feet wide, was built, where on the outside face there is a depth of 9 feet at low water.

HAGGERTIES' WHARF.

Haggerties' wharf, Queen's county, is situated on the eastern side of the Hillsborough river, about 12 miles from Charlottetown. The wharf consists of a shore abutment or approach, 372 feet long, and 20 feet wide, and a pier head, 91 feet long by 31 feet wide, at outer end. It extends out to a depth of 9 feet at low water or of 19 feet at high water spring tides, which here rise 10 feet.

The wharf, which was constructed by the P. E. Island government, remained under its control until 1898, when it was taken over by the federal government. Being an old structure and constructed, for a great part of poles, brush and stone with clay filling on top to form roadway, it now, from time to time, requires some small expenditure to keep it in passable condition for traffic. This was the case during the past season, when repair of the roadway, &c., became necessary, some washout and settlement having occurred; repairs to covering of pier head, guard timbers and fenders were also effected, in all a cost of $145.42.

HICKEY'S WHARF.

Hickey's wharf, Queen's county, is situated on the southern side of the East or Hillsborough river, about 10 miles from Charlottetown. It was constructed by the local government many years before confederation, and is one of the P. E. Island piers, control of which was assumed by the Dominion government in 1884. The work is 428 feet long with width of from 22 to 30 feet; the length of the latter width extends inward from the outer end of the pier for 180 feet and forms the chief loading place for vessels. Dredging was done in 1881-2, giving a depth of about 10 feet at low water or of 19 feet at high water spring tides, that here rise 9 feet.

The wharf being a very old structure and much out of order when taken over by the Dominion government, it has since required, about yearly, some repairs to keep it in condition for traffic, and as must be the case until considerable portions of it be reconstructed, much of the bottom being defective, owing to ravages of the 'teredo,' settlement and washout of the filling takes place on the occasion of about every storm.

During the past fall, it was found necessary to expend the sum of $249.84 in rebuilding, for the greater part, a length of 60 feet of the inner part of the portion 30 feet wide; longitudinals and cross-ties, floor stringers, covering, &c., were put in, some general repairs of planking, &c., on pier head were also made.

HIGGINS' SHORE.

Higgins' Shore pier, Prince county, is situated on Egmont bay, about 10 miles north from Cape Egmont, and about six miles west from Richmond station on the line of the Prince Edward Island Railway. The pier, which was constructed many years ago by the provincial government, is one of the Prince Edward Island piers, control of which was assumed in 1884-5 by the Dominion government.

It was then 453 feet long, with a width of 20 feet, and extended out to a depth of about 2 feet at low water, or of about 7 feet at high water, spring tides, that here rise 5 feet. The pier has close-faced timber sides and end, well secured together with cross and longitudinal ties, the body of the work being filled in with brush and stone, and a roadway on this of clay and gravel. No repairs having been effected on the pier since 1898, it had, in 1905, become unfit for use owing to decay of face-timbers and washout by storms of the roadway, filling, &c. Repairs were made by the department during the summer and fall of 1906; new face-timbers were put on averaging 3 feet in height over the whole length of both sides; the ends were rebuilt, longitudinal and cross-ties put in and roadway made up with stone and gravel. A portion of the materials was also got out for the proposed extension and pier-head, at an expenditure, in all, of $1,976.37.

The existing work being too narrow for the convenient turning and passing of teams, &c., and a further short extension being necessary to give additional depth of water, the desired improvements were effected during the past season, at a further cost of $1,223.81, by the construction of a close-faced, solid timber 'block,' 40 by 35 feet, to form new pier-head, this being placed 15 feet distant from outer end of the old pier, and to which it is connected by a span, floor stringed and planked over.

MC PHERSON'S COVE

McPherson's Cove, King's county, is on the south side of Grand river, a short distance inward of what is known as 'Morrison's Beach.' This beach, which separated Grand river from Boughton bay, has a length of nearly a mile, and extends in a northerly direction to opposite Annandale village and pier, from where a ferry is maintained, to the end of the beach, where a small wharf is built. Shipments used formerly to be made from this wharf, but for some years past it has been out of use.

In 1904-5, at the request of the people of the district, the department constructed a wharf at the cove, this, 700 feet long, consisting of a shore abutment, 300 feet in length; five 30 feet 'blocks' with 20 feet intervening 'spans,' and an outer 'block' of 100 feet that connects with a 30-foot pier-head. The wharf, excepting the pier-head, which is 30 feet wide, has a width of 20 feet. Up to 2 feet above low water, the work is built of close laid poles, above which it is of square timber, close-faced, solidly filled with ballast, fendered, &c.

To further improve the shipping facilities at the place, a contract was let on November 5, 1907, for a further extension of 200 feet, to have a width of 30 feet, and consist of two 80 feet 'blocks' with intervening 'spans' of 20 feet each.

Work on this was commenced on February 26, 1908, and by March 31 the bottom portion of the cribs, which are formed of close laid poles, had been placed in position and fender-piled at about 10 feet centres, the work being done through the ice, which was entirely removed from the space to be occupied by the work.

Expenditure in 1907-8 amounted to $1,306.08.

MIMINIGASH.

Miminigash harbour, Prince county, is situated on the northwest coast of the island, about 15 miles south from North Cape, and 18 miles north from West Point, at the outlet of Big Miminigash pond, where it enters the straits of Northumberland. It was selected by the department as the most suitable site for the formation of a small harbour and shipping place for the district, it being sheltered to a great extent by 'Miminigash Reef,' a ledge of rock nearly a mile long, which lies parallel with the shore, about half a mile distant.

Works were commenced at the place in 1878, and these now consist of piers, or breakwaters, on either side of the entrance (position of which has been made permanent), confining its width to 56 feet. The breakwater on the northern side is 550 feet long, and that on the south side 400 feet. Inward of these are beach protection works to guard against channels being made through beach by high storm tides; a good roadway has also been made, 1,200 feet in length, over the sand beach.

These improvements give shipping facilities, good accommodation and shelter for fishing boats and small vessels, as the former can now enter at all stages of the tide, while before the construction of the works, even the smallest class of fishing boats could only enter at high water, the channel at low water being almost dry. One difficulty remaining, however, has been that northerly storms, when very severe, carried quantities of sand and gravel from the outside beach onto and over the breakwaters and into the run or channel entrance and harbour, reducing the depth of water, until gradually again deepened by scour of the current, or removed by hand dredging. To prevent

sand, &c., being thus carried into the harbour, a cribwork block, 120 feet long, averaging about 15 feet wide and 10 feet high, extending to near low water, was constructed in fall of 1904. It was placed about 50 feet north of the northern breakwater, and has a height of about 4 feet above the latter. It is said to have proved of much benefit, but to be effective it required to be extended, which was done during last summer.

A length of 110 feet has been added to the outer end of the work, built in 1904; the latter was also raised about 1½ feet, and general repairs made to the fender piling, covering, &c., of the northern work.

Expenditure during 1907-8 amounted to $1,496.78.

NEW LONDON.

New London, Queen's county, is on the northern coast of the island, about 10 miles east of the entrance into Richmond bay, and about 9 miles west from Rustico harbour. The harbour, or New London bay, has within the entrance a length of about three miles and nearly the same width; it receives the waters of the Southwest, the Stanley, the French and Hope rivers, all of which are navigable for short distances, and where wharfs have been built for the shipping of produce. The districts surrounding the harbour are well cultivated, very productive and thickly settled. A large quantity of general merchandise, coal, lumber, &c., is imported by water, the district having, as many other portions of the island, no convenient railway facilities. The harbour is also largely used as a fishing station and harbour of refuge for fishermen and is most conveniently situated, being near some of the best fishing grounds on the Gulf of St. Lawrence.

For the improvement of the entrance, which is obstructed by a shifting sand-bar, works were commenced by the department in 1878, and these now consist of breakwaters and beach protection works on each side. That on the eastern side has now a length of 1,200 feet, while the western one is 460 feet long; their purpose is to confine the water by preserving and extending the sand beaches, and, by the increased current so caused, scour away a part of the bar, which result has been obtained to a satisfactory extent, as it is found that the depth of water is always much improved at such times as the beach protection works remain in good condition.

Since its construction, the western work has received no injury requiring repairs or expenditure, but the one on the eastern side, being exposed to very heavy seas on the occurrence of northerly storms, to a strong current and action of the ice, requires some expenditure, about yearly, for its maintenance.

During the past season, the sum of $991.06 was expended in reconstructing a length of 200 feet of work, destroyed by storms of December, 1906; to repair and ballast portions of the work where wash-outs and settlement had occurred, and to secure the sheathing, &c., of outer block.

PANMURE ISLAND.

Panmure island, King's county, is situated on the south side of Cardinal bay, about four miles from Georgetown. It is about 1½ miles long by three-quarters of a mile in width, and is connected with the mainland by a sand beach, about 1½ miles in length.

Formerly, there being no shipping facilities on the island, all the surplus produce were hauled over the long connecting sand beach to St. Mary's bay wharf, a distance of six miles, or loaded in small boats on the shore, thence unloaded into vessels anchored in the bay.

For improvement of these conditions, the department, during 1904-5-6, constructed a small wharf on the south side of the island, 280 feet long by 20 feet wide, at a cost of $1,800, and which extended out to about low water spring tide mark, where there was a depth of about 4 feet at high water spring tides, permitting of freighting by the larger class of boats.

During the past season, an expenditure of $1,500.33 was incurred in extending the wharf 110 feet. The new work built has a width of 25 feet and its end reaches about one foot better depth of water. The bottom portion of all of the wharf, up to about half tide mark, is constructed of close laid poles, placed in alternate layers, lengthwise and crosswise; the upper portion is of timber secured together by longitudinals, cross-ties, &c., and solidly filled with ballast; the roadway is formed of broken stone and gravel filling on top.

POINT PRIM ISLAND.

Point Prim island, Queen's county, although not properly an island, it being connected with the mainland almost over its full length with sand beaches and marsh, is situated on the south of Hillsborough bay, and about one and a half miles east, inwardly, of Point Prim, and about thirteen miles south of Charlottetown. It has a length of three-quarters of a mile by one-quarter of a mile wide, and, although both uncultivated and uninhabited, it has been looked to for many years, by the residents of the district, as a favourable place for the construction of a wharf; a small cove formed by the projection of its eastern end affording shelter from all but northerly winds.

To provide shipping facilities and shelter for fishing boats, a contract was let on March 4, 1907, for the construction of a wharf, 280 feet long and 18 feet wide on top, to extend out to a depth of about 7 feet, at high water, (being dry at low water springs). Work was commenced on June 17, 1907, and satisfactorily completed on November 14, at the total expenditure of $4,473.75.

POWNAL.

Pownal pier, Queen's county, is situated on the northeastern part of Hillsborough bay, about nine miles east from Charlottetown. It was built by the local government many years before confederation, and is one of the Prince Edward Island piers, control of which was assumed in 1884 by the Dominion government. The pier is in all 753 feet long, consisting of shore abutment or approach, 209 feet in length and 16 feet wide, and of 14 blocks with intervening spans; the inner blocks are from 14 to 16 feet wide, while the outer ones, forming the pier head, have a width of 40 feet.

Originally there was little or no water at the pier at low water, but in 1881-2, in order to permit of large boats and small vessels reaching it at all times of the tide, and large vessels at high water, the department had a channel dredged, 1,275 feet long and 50 feet wide, from the deeper water outside, carrying a minimum depth of 6 feet at low water, and also forming a basin, 250 feet long and 90 feet wide, on the eastern side of the outer end of the pier.

This dredged channel, &c., having gradually, for some years past, become filled in, the department, during the fall of 1906 and summer of 1907, had the channel reopened, so as to carry a minimum depth of 10 feet at low water, extending it until reaching that depth outside; loading berths and basin were also formed, carrying same depth, at outer end of pier. At the time the pier was assumed by the Dominion government, it was a very old structure and much out of repair: it has since, at different times, required expenditures in order to keep it in condition for traffic. During 1902-3, extensive repairs were effected, all of the length of the pier was put in good condition out to pier head, and this latter (40 by 90 feet) during last summer was also thoroughly repaired, its top portion being reconstructed, new floor-stringers, planking, &c., being put in.

The expenditure during 1907-8, amounted to $599.83.

RED POINT.

Red Point pier, Queen's county, is situated on ths southeastern side of the Hillsborough river, about six miles northeasterly of the city of Charlottetown. It is 650

feet in length and 21 feet in width, and consists of a shore abutment, 310 feet long, and 5 blocks of from 29 to 75 feet long, with intervening 'spans' from 21 to 25 feet wide. The shore abutment and the blocks, as well as the openings, are planked over.

During the past season, the sum of $100.19 was expended in general repairs of roadway, where washout and settlements had occurred; defective planking was also renewed on spans and pier head.

ROBINSON'S ISLAND.

Robinson's Island breakwater, Queen's county, is situated on the eastern side of the entrance to Rustico harbour, and at the western end of Robinson's island, which extends in an easterly direction about three miles to Little Rustico harbour. where, by a small channel, fishing boats can enter the harbour.

The island consists principally of low, sandy beaches with high sand hills, ranging along their centres, excepting at the eastern end, where a small portion is under cultivation. On its northwestern side, and about 1,500 feet distant in a south-easterly direction from the North Rustico breakwater, the department, in 1883, built a work 450 feet long, for the purpose of, in conjunction with the former, contracting the entrance so as to cause, by the increased current, improvement in the depth of water carried over the sand bar at the entrance; the work, however, being of too slight construction, was some years ago carried away. Marked changes meantime occurred in the channel and beaches; the depth of water on the bar was improved to 7 feet at low water, or 10 feet at high water, spring tides.

To further improve the harbour entrance, a contract was entered into, on July 4, 1905, for the construction of a breakwater, 750 feet in length, extending in a north-easterly direction from the western end of the island, its outer end to be distant about 1,000 feet from the outer end of the northern work; the inner end of the new work is to be constructed, for a length of 200 feet, of round log open cribwork, 13 feet wide, with cross-ties and fender piles at 10 feet centres, and with ballast floor on lower cross-ties and solidly filled with ballast. A further length of 500 feet will have a width of 18 feet and be constructed of piling, secured to walings solidly filled with brush and stone, planked, &c. The outer 50 feet will be of similar construction, but 26 feet in width.

The work, which was commenced in the latter part of July, 1905, but suspended about the end of September of that year, was resumed on May 15, 1906, and continued to the end of October, at which time all of the length had been carried out so far as the piling was concerned and greater part of the covering done, but required quite a quantity of filling and bolting of the piling, &c.

Work was again resumed about March 1, 1907, and satisfactorily completed on July 31.

Expenditure during 1907-8 amounted to $3,500.

ROUND POND.

Round Pond, Prince county, is situated on the northeast coast of the island, about two and one-half miles southeast of Tignish harbour; it is quite small, being not more than 1,500 feet in length by about 1,000 feet in width, and carrying at ordinary low tide an average of about 5 feet of water. The pond has (when such is not blocked) an outlet by a shallow stream, about 1 foot deep and 600 feet long, and from 20 to 30 feet wide, into the Gulf of St. Lawrence.

Much of the land adjoining is quite low and said to be flooded when the outlet becomes closed by northeasterly storms, as it often occurs, sometimes the water rising so high as to flood both the public road and the bridge, preventing travel. The blocking up of the outlet, besides causing flooding of the low land adjoining the pond, also

prevents entrance of gaspereaux, trout and other fish for the purposes of spawning.

The sum of $50 was expended in keeping the channel clear, during last summer and fall, and arrangements were made to keep it open until June 30, 1908.

RUSTICO.

Rustico Harbour, Queen's county, is on the north side of the island, about midway between East Point and North Cape, and is one of its most important fishing stations.

For improvement of its entrance, which is obstructed by a shifting sand-bar, the department, during 1881-2-3-4, constructed a breakwater on the north side of the entrance, with a view to confine the current at ebb tide, and thus, by scour, deepen the water, beside forming protection to the low beach on which are situated most of the fishing stages and houses of the fishermen. The work, originally 1,240 feet long, was composed partly of solid close-faced timber work, and partly (this for the inner 500 feet) of pile, stone and brush. The piles having been completely decayed for some years past, the work was unable to withstand the severe storms and high tides of November 1 to 13, 1906, and for a length of 400 feet was completely carried away endangering the safety of the fishing houses and stages, and making it possible that a channel might form through the beach.

To prevent this, temporary repairs were effected at a cost of $427.75; a breastwork of brush, poles and ballast was constructed, which accumulated the drifting sand, and made up the beach to such an extent that, notwithstanding the further storms in December, 1906, and last spring, little further expenditure was required to thoroughly secure that portion of the work. Its outer end, however, had suffered severely, portions of the sheathing and stringers having been carried away from off the sloping face, permitting washout of ballast; most of the fendering and some of the face-timbers on the inner face have also been destroyed, this latter owing principally to age, being original ones placed in the work in 1884, when it was first constructed.

During the past fiscal year, all repairs possible and considered necessary were effected, and consisted in replacing ballast, sheathing, stringers, deck-plank, inserting face-timbers required and fendering inner face, 5 feet centres, at a total cost of $931.63.

ST. MARY'S BAY.

St. Mary's Bay pier, King's county, is situated on the southern side of St. Mary's bay; it was constructed many years ago by the provincial government, and is one of the Prince Edward Island piers, control of which was assumed by the Dominion government in 1884.

It measures 407 feet in length; for a distance of 310 feet it is 21 feet wide, and the outer 97 feet is 29 feet wide. The work consisted of a shore abutment or approach and seven 'blocks' with intervening 'spans' but six of the 'spans' were some years ago, fil'ed in, and the roadway out to the 'span' adjoining the pier head, entirely formed of clay and gravel.

Since the pier was taken over by the Dominion government, the approach thereto has been much improved and the outer block or pier-head levelled up, close-piled, &c.

In 1892-3, a channel, carrying 10 feet of water, was dredged, with a basin at the end and loading berths on the sides of the pier, 50 feet wide and 100 feet long.

During the past fall, the sum of $29.05 was expended in temporary repairs to roadway approach, where washouts and settlement had occurred; broken and defective planking on the pier head was also renewed.

ST. PETER'S BAY.

St. Peter's Bay, King's county, has its entrance from the Gulf of St. Lawrence, about 35 miles west from East Point. The bay is of considerable extent, running inland about eight miles with an average width of three-quarters of a mile, and carrying a depth of from 2 to 3 fathoms at low water The entrance, however, is obstructed by a shifting sand-bar, where there is only from 6 to 7 feet at low water, which permits only of small vessels entering the harbour.

To increase the depth of water over the bar, which, it is said, was nine feet in 1860, the department, in 1878, began the construction of a breakwater on the west side of the entrance. This breakwater is 256 feet long, built of close-face solid timber work, fully ballasted, floor-stringered and planked over; its inner end connects with a beach protection work 1,420 feet long, extending across the beach to the high ground, and so preventing a channel from cutting through on its inner side.

In 1883, it was proposed to further contract the width of the entrance by the construction of a breakwater, 1,900 feet long, extending from the eastern beach; but the contractor abandoned the work when less than half built, and for some years nothing has remained of the part built.

The matter of improving the entrance having again been taken up by the department, a contract was entered into August 3, 1905, for the construction of a work, 900 feet in length, to extend from the end of the east beach towards the outer end of the western work, but further than getting out some materials, nothing was done until latter part of May, 1906, when driving of the bearing piles was commenced; work being continued up to end of October, when it had to be suspended owing to a succession of storms. The work done up to that time, had consisted in the putting in of the bearing piles, one set of walings and cross-timbers at 10 feet centres over the entire 625 feet in length of outer and pile-work portion of the breakwater; constructing, in part, the inner 275 feet composed of cribwork, &c., and finishing the putting in of the walings, cross-timbers, close-piling, also in part ballasting 200 feet of the pile-work.

Work was resumed May 1, 1907, and continued up to October 12, when it was satisfactori'y completed. According to reports received this spring, the depth of water carried over the bar has improved fully two feet.

Expenditure during last fiscal year amounted to $9,198.71.

SOURIS HARBOUR.

Souris harbour, King's county, is situated on the southern side of the island, about 16 miles west from East Point. It is most important as a harbour of refuge and place of shipment, for both of which it has been made available by the breakwater built and maintained by the Dominion government.

The work, which was commenced in 1875, has now a length of 1,250 feet; being of different forms, widths and construction, it may best for description, be divided into three sections or portions, viz.:—

Inner.—290 feet long and 30 feet wide, formed of close-faced timber, plumb faced on sides, and having on seaward side a protecting stone slope, the work standing in an average depth of seven feet of water at low tides.

Middle.—530 feet long and averaging 65 feet wide, also of close-faced square timber, but on seaward side having the upper 10 feet sloping one to one; this section stands in an average depth of 17 feet at low water and has stone protection slope formed on its seaward side.

Outer or third section, about 400 feet long and 22 feet wide, which has also stone protection slope on its seaward side, extending to three feet of the top, and sloping three to one; the end of the breakwater terminates with a block, 40 feet by 80 feet, constructed of close-faced creosoted timber, standing in a depth of 22 feet of water at L.W.S. tides.

The outer narrow section of the work requiring covering, and having been built some two feet lower than the other parts, a contract was let on November 21, 1906, for the sum of $3,295 for raising, covering, ballasting, &c., that part of the work, all of which was satisfactorily completed by September 21, 1907.

Expenditure during last fiscal year, $2,573.30.

SUMMERSIDE HARBOUR.

Summerside harbour, Prince county, is on the southerly coast of the island, and is its second place in importance for shipping, &c. The town of Summerside is in population next to Charlottetown, having some 3,000 inhabitants; it is also one of the principal stations on the line of the Prince Edward Island Railway, by which it is distant from Charlottetown 49 miles, and from Tignish, the western terminus, 68 miles.

During the season of navigation, daily communication is had with the mainland by the steamers of the Charlottetown Steam Navigation Co., Ltd., at Point du Chene, where connection is made with the Intercolonial Railway and so with all parts of Canada and the United States.

The entrance into the harbour, between Indian Head and Phelan Point,, is about 1½ miles wide; a sand pit, however, partly dry at low water, stands about 3,200 feet from Indian Head, the water also being shoal for a distance from the opposite shore, so that the deep water channel, carrying 18 feet of water or better, is only about 500 feet wide opposite the lighthouse, that is situated on the north side of the sand spit, outward of Indian Head. Inward of this, the channel to the railway and other wharfs at the town, is from 400 to 1,200 feet wide, and has a depth of from 23 to 30 feet at low water spring tides.

For the improvement of the channel as to depth and direction, dredging at different times, has been done by the department, while, for protection from southwest winds, a contract was entered into, on February 27, 1906, for the construction of a breakwater, to extend 3,220 feet from Indian Head to the outer side of the sand spit, on which the lighthouse is situated. The work will consist of a cribwork core to about the height of H.W.S. tides, then built up and fully ballasted, entirely covered over with stone, forming a rubble mound, four feet wide on top and five feet above H.W.S.T., with slopes on seaward side of two to one and on the inner side of 1½ to one. The length of this stone work will be 3,200 feet; at the end will be an outer block, measuring 112 feet long by 20 feet wide on top, constructed of close-faced timber work, fully ballasted and having slopes of one to one on its seaward side and ends. All the timber below high water will be creosoted.

Construction was commenced early in May, 1906, and continued up to about the middle of November of that year; the work done being the building, partly to height and placing in position, ballasting, &c., of a length of about 700 feet of the cribwork core; some rip-rap was also placed. Work was resumed on May 1, 1907, and continued up to the end of November of that year, during which time good progress was made; the outer creosoted block was completed, except putting on of deck plank and some little ballasting; the portion of the cribwork core, placed in position the season before, was built up to required height, and some 9,500 cubic yards of ballast delivered and placed.

The expenditure during the last fiscal year amounted to $30,640.

TIGNISH.

Tignish, Prince county, is on the northeast coast of the island, about 8 miles south of North Cape, and is situated at the mouth of Tignish river, a small stream that enters the Gulf of St. Lawrence. As at each side of the river mouth the coast line is quite straight for several miles, gales from the northeast to southeast throw in a heavy sea, and this, acting on the fine sands of which the beaches are for the most part com-

posed, caused the formation of a bar across the entrance on which, at best, only about one foot of water was carried at low tide, and frequently, was entirely blocked and would so remain until again broken through by a high freshet, or some other abnormal cause, but which often gave it a changed position.

To keep the river permanently open and confine the channel always to one and the same bed, the government of Prince Edward Island, in 1868, commenced the construction of works at this place, building piers or breakwaters on both sides of the mouth of the river, contracting the stream to a width of 40 feet and had up to July 1, 1873, when the island entered confederation, expended the sum of $8,150 in building a work, 830 feet long by 21 feet wide, on the south.

Since confederation, the original works have practically been rebuilt and extended by the department; beach protection works have been constructed on either side (2,775 feet on north side and 850 feet on the south side), extending over the low-lying beaches to the high ground, to prevent breaches being made through them by the sea; a portion of the channel was also dredged in 1886-7, all of which has proved of great benefit.

The channel never had less than 6 feet in it at low water, which, with spring tide rise of 3 feet, gives ample depth for use as a fishing station and place for shipment by small schooners.

Portions of the work having become decayed and injured by the action of the ice and ravages of the 'teredo,' &c., repairs and strengthening to outer end of the northern work became necessary and this, with general repairs, of its covering, was effected during the past season at a cost of $1,004.85.

VERNON RIVER.

Vernon River pier, Queen's county, situated at the head of navigation on the Vernon river, which is about two miles above its entrance into Orwell bay.

The pier is one of the Prince Edward Island piers which were transferred to the Dominion government in 1884; it is a close-faced timber block, 129 feet in length and 30 feet in width, placed parallel with the edge of the channel where a depth of 9 feet of water is carried at low water spring tides, or 17 feet at high water springs, that here rise 8 feet. It is on the lower side of and about 30 feet distant from the public bridge with which it was connected by an approach or span, 30 feet in width, floor-stringered and planked over—as this had to be removed last season owing to the construction of a new steel bridge, another means of approach to the pier had to be provided.

A new approach was built by the department during last summer, consisting of a work, 200 feet in length by 24 feet in width, extending from the shore to the outer end of the pier. The total expenditure, including the cost of land for a new roadway, &c., was $2,607.09. The work has close-laid pole-work bottom up to within 5 feet of finishing height; the top is of close-faced square timber, secured with longitudinals and cross-ties, fully ballasted, fendered, &c.; the roadway is of broken stone and gravel.

WEST POINT.

West Point wharf, Prince county, is situated on the north side of Egmont bay on the eastern shore of the Northumberland strait, about fourteen miles from O'Leary station on line of the Prince Edward Island Railway, and about thirty-five miles by water from Summerside harbour.

The wharf was originally one of the Prince Edward Island piers, control of which was assumed by the Dominion government in 1884; it had been built many years before confederation by the provincial government to give shipping facilities to the district, there being no wharf or shipping place at the time, between Summerside and North Cape, where vessels of any size could call. West Point, being midway, was considered a favourable site, and the work is said to have proved of much benefit until it was seriously damaged on the breaking up of the ice in the spring of 1884;

it remained in bad condition until 1898, when it was thoroughly repaired by the department, the wharf at the time having a length of 620 feet, at low water, width of 30 feet and extending out to a depth of about 7 feet at low water or of 11 feet at high water spring tides, which here rise 4 feet.

For the purpose of obtaining a better depth of water, a contract was let in 1900, for an extension of 100 feet, 30 feet wide, extending out to a depth of 9 feet at low water, was completed in 1901; it has, however, since shoaled to a depth of about 7 feet at low water on a bar that has to be crossed for its approach. Some settlement occurred in the outer part of this 100 feet extension, levelling up of which was effected during the spring of 1905, portions of the sides, as well, being close-piled.

It had been intended during the past season to close fender-pile a further length of the work, where it had been weakened by the action of the teredo, but such was found not to be possible with the sum available for expenditure, as the greater part of this was required to effect the repair of an inner part of the work, 175 feet long, that had been damaged by running ice during the early spring, and this was put in good order and serviceable condition; 200 feet, as well, of the sides of the wharf that had intended being close-piled were fender-piled at 3 feet centres, which will ensure its safety until such time as its complete repair is possible.

The total expenditure was, for repairs and fender-piling, $1,463.99.

WOOD ISLANDS.

Wood Islands, Queens county, situated about thirty miles from Charlottetown in a southeasterly direction, and about fifteen miles westward from Cape Bear, are the most southerly part of Prince Edward Island. Originally two small islands, they are now connected together, as well as to the shore, by sand beaches; a sand spit, extending out from the shore to within 300 feet of the eastern island.

Work was commenced in 1859, by the provincial government, but up to 1894, at no time were the works complete or in good condition, little, if any, benefit resulted from them until the latter date, when they were reconstructed by the department. The southern work has since been extended, and now has a length of 950 feet, while the northern one is 2,500 feet long. It had been supposed that the construction of these works would so narrow the entrance that the increased current would, by scour, preserve a good depth of water at the entrance and up to loading berths; but such did not prove the case, the widths left between the breakwaters or piers being too great. To obviate this, there has been two jetties built, extending towards the channel, from the southern work, one 190 feet and the other 70 feet long, which has greatly improved the depth of water.

These jetties, having somewhat settled, were repaired and levelled up during last summer and fall; repairs were effected to the southern work which was injured by ice-jam in the spring, and a new block, 30 feet by 50 feet, built at the inner side of the outer end of the northern work, both for the purpose of strengthening it and to further narrow the entrance and, if possible, to cause, by scour, an increase in the depth of water.

The total expenditure during the last fiscal year amounted to $2,574.30.

PROVINCE OF NEW BRUNSWICK.

ANDERSON'S HOLLOW.

Anderson's Hollow, Albert county, is a cove of Salisbury bay, on the northwest side of Chignecto channel, in the Bay of Fundy. Spring tides rise 40½ feet; neaps 32½ feet.

The breakwater wharf at this place was begun in 1879 by the construction of a detached block, 550 feet from the shore, with which it was afterwards connected. In

August, 1885, the work was 290 feet in length, and, three years later, was carried to the shore. The structure, 25 feet wide on top, was originally 27 feet high at the outer end, but the bottom having been raised by the accumulation of the littoral drift, the height is now 3 or 4 feet less. It is built of round timber cribwork, lightly battered on the inside, but sloped at the rate of one-half to one and sheathed on the weather face.

The breakwater was damaged by storm on November 21, 1895, when a small lighthouse placed at the outer end was swept away, with part of the break, while some of the top work at the head was simultaneously shaken and started.

In 1895-6, a small sum was supplied to bolting loosened timber for temporary security.

During the fiscal year 1896-7, the inside face of the wharf, at the outer end, which had received a heavy list in the storm of the previous year, was taken down and rebuilt for a distance of 75 feet on top and 44 feet at the bottom. The list was taken out, the new face was carried to a height of 15 feet, in order to level the top, and new covering was laid for a length of 75 feet. Seventy feet out of 110 feet of dismantled break were reconstructed, and fenders were placed on the inside of the new face.

In 1898-9, by an expenditure of $121.31, 27 pieces of new sheathing were laid and bolted to the sloping face; a new cap and face-timber were inserted, and the gap in the break, 40 feet long, left unfinished at the time of the previous repairs, was built up with four tiers of timber, strengthened with knees.

In 1900-1, the break-timbers, which had been started up from three to nine inches by storms, for a distance of 290 feet, were restored to position. For 25 feet at the outer end, the break was raised one tier; eight bridles, nine inches square, were placed between the knees of the break, for a distance of 100 lineal feet; three new pieces of six-inch sheathing were placed on the sloping face, and loose planks were secured with bolts. Through the shoal, obstructing the work on the inside, a channel 300 feet long, 35 feet wide and 5 feet deep, was made by means of a wheel scraper. It was found, however, that the shoal again formed rapidly with the recurrence of any southwest swell. A groyne, 50 feet in length, made of piling and 9-inch timber, was built on the outside of the work, in order to check for a time the accumulation of littoral drift on the inside.

During the year 1901-2, new sheathing, six inches thick and from 22 to 26 feet long, was laid and secured with ¾-inch bolts at different places, along the weather face of the outermost 190 feet. Additional bolts were also driven to secure the old and loosened sheathing, while 71 pieces of new covering, six inches thick, were placed on the top of the work.

During the year 1902-3, the weather face of the outer block, 100 feet long, having become decayed, was cut down nearly to the bottom and rebuilt for a width of 13 feet, with heavy timbers secured in great measure with screw bolts, the outside being sheathed with 9-inch spruce. More than half the covering of this block was renewed. On it a new break was built three tiers in height for 26 feet, two for 61 feet and one tier for 13 feet in length. The covering was patched on other parts of the work. Four new fenders were placed and the cap was renewed for a length of 47 feet. An extension of 50 feet, for which foundations were excavated through the shoals to the rock, was begun and brought up to a height of four tiers.

During the fiscal year 1903-4, the break on the outer block was completed and the sheathing fully bolted. An extension, 50 feet long and 27 feet wide on top, was brought up to within two tiers of the finished top. The sheathing, fenders and covering yet required to be applied to complete this extension. The shoal was excavated sufficiently to make beds for the shipping.

Like many other works in the Bay of Fundy, Anderson's Hollow crosses the direction of the flood stream and of the prevailing winds. In consequence, an accumula-

tion of littoral drift is found on the southwest side, which travels around the end, and is deposited under the lee of the breakwater, forming a shoal which is an obstacle to vessels.

In 1904-5, the extension was completed, sheathed, covered, ballasted and fendered; one new ladder was made and placed in position; a quantity of sheathing was re-bolted; five new fenders were placed; 700 lineal feet of pieces of covering were laid; 35 feet of new cap were placed; one new mooring-post was put in, and the break was rebuilt for 72 lineal feet.

The steep approach to the wharf was, besides, improved by lowering the rock cutting 4 feet, by widening to 14 feet, and by making an embankment 21 feet wide, supported on both sides by retaining walls of stone, each 33 feet long, nine feet in mean height and 2½ feet in mean thickness, containing 55 yards of dry masonry.

In 1905-6, from 80 to 90 new pieces of sheathing were laid on the battered face; 13 ribs were bolted to strengthen the break; seven fenders were secured; two new mooring-posts were placed in position, and a bed for vessels was laid alongside the work. A dyke of brush and stone, 420 feet in length, containing 155 cubic yards, was built to lead the stream to scour the shoal.

In 1906-7, brush and heavy stone were placed on the dyke to strengthen it, and three mooring-posts, for the work, were procured.

Early in the spring of 1907-8, a bed for vessels was prepared and buoys were placed. Three mooring posts and eight fenders were renewed; the covering was patched and the break, for a length of 50 feet, was rebuilt in a stronger form. Seventy-eight new pieces of sheathing were laid on the seaward face, and several of the old pieces were secured.

The expenditure during 1907-8 amounted to $474.82.

BACK BAY.

Back Bay, a fishing station four miles west of L'Etang and two miles east of Latête, is situated on an arm of Latête harbour, in the county of Charlotte.

At this place, the provincial government built a wharf of crib and trestle work, 239 feet in extreme length, extending nearly to low water mark. An extension of this wharf, of 86 feet, comprising a pier-head, 50 by 30, of round cribwork, fully ballasted, sheathed on both sides for protection from ice; a block of 20 feet square on top, and two spans of 18 feet, the whole carrying the end into 8 feet at low water, was added by the department during the fiscal year 1900-1. This work was built by contract.

Back Bay is a regular place of call for one of the steamers of Passamaquoddy bay, running from St. Stephen to Eastport, Campobello, Deer Island, Latête and other intermediate points. Spring tides rise 24 feet.

Towards the end of the year 1901-2, a landing to suit different heights of the tide was begun; a gallows for hoisting freight was built, and a ladder placed against the face of the work.

In 1902-3, the steps on the north side of this new wharf, begun in the previous year, were completed. To suit the different stages of the Bay of Fundy tides, the steps were provided with three landings at intervals of about 7 feet in vertical height.

During the fiscal year 1907-8, the covering was renewed and repairs were made to the low water landing, and hand-rail, which had been damaged in the storm of the first of February.

The expenditure during 1907-8 amounted to $196.17.

BUCTOUCHE.

Buctouche, Kent county, with a population of between 600 and 1,000 is situated four miles above the mouth of the Buctouche river which empties into Northumberland

strait, twenty-two miles south of Richibucto and seventeen miles north of Shediac.

In 1884-6, the department constructed a cribwork wharf, 300 feet long by 40 feet wide, with a depth at the face of 17 feet at low water and 21 feet at high water of spring tides, off from and at right angles to the highway bridge at Buctouche.

The wharf was badly damaged by fire in 1894 and partly repaired in the following year.

Between 1899 and 1901 and in 1903-4, the wharf was rebuilt with pile-work on the outer 25 feet and filled with brush, stone and earth on the inner 15 feet of the width, and in 1905-6, 6-inch creosoted sheet piling was driven between the fenders along the outer face and the wharf was filled, to from 2 to 3 feet of the flooring, with brush and stone.

The planking, procured for the repairs in 1898-9, for covering the upper 152 feet of the wharf, having become worn out, new 3-inch plank was laid over it in October and November, 1907. The rear section of the wharf and the sloping approach from the bridge were also levelled and graded, by the addition of about one foot of stone and earth, for a length of 100 feet, and widened 4 to 5 feet in the rear.

The expenditure for the fiscal year 1907-8 was $337.01.

BUCTOUCHE BEACH.

Buctouche harbour is separated from Northumberland strait by a sand beach from six to seven miles long. The entrance to the harbour is at the southern end of the beach. The northern end, off which are important fishing grounds, is connected with the mainland.

The inhabitants of the northern end of the harbour are practically debarred from outside fishing on account of the distance from the village around by the harbour entrance to the fishing grounds, and there is no shelter for boats on the outside shore. It is therefore proposed to make a cut through the beach at its northern end, the narrowest part, the width there being only about 500 feet.

Work was begun in May, 1905, and consisted of building a stake and brush breastwork, 2,800 feet long, to raise the low parts of the beach formerly washed by storm tides. A similar breastwork, 306 feet long, was constructed in 1906-7, parallel to the other at the lowest point. About 4,000 cubic yards of sand were removed from the site of the canal by scrapers and hand labour.

During the fiscal years 1905-6 and 1906-7, two breakwaters were built to protect the outer end of the cut. The north breakwater is 219 feet and the south breakwater 143 feet long. The inner 35-foot sections of the breakwaters are 4½ feet wide and are formed of two rows of piles, driven 4 feet, centre to centre, and filled between with brush. The outer sections are 11½ feet wide out to out, are close-piled on the outside and have two rows of main piles driven 6 feet, centre to centre, and connected with walings and cross-ties of square timber; they are filled with brush and stone. A breastwork, 434 feet long, of close-piles backed with brush and connected by braces with piles 6 feet, centre to centre, driven 10 feet in the rear, was built along the north side of the cut.

During the fiscal year 1907-8, this latter breastwork was extended 154 feet to the north breakwater, and a similar breastwork was built for a length of 106 feet, along the south side of the cut. A breastwork, 160 feet long, of close piles, was also built southwards from the inner end of the south breakwater, to protect the sand banks which were being carried into the cut by storms; the angle between the breakwater and this breastwork was further protected by a mattress, from 12 to 18 feet wide, and 94 feet long, which was covered with large stone. A light breastwork of stakes and brush, 434 feet long, was built outside the pile-work, on the north side of the cut, and the original work, along the beach which had become covered with sand, was raised by stakes driven on top of it for a length of 800 feet, and filled with brush to still further raise the beach.

A quantity of stone, piles, &c., was procured for extensions to breakwaters, and in March, 1908, a mud-digger, operated by a steam winch, was fitted up and tested for excavating the channel through the beach. On account of the difficulty of removing the ice and frozen sand, the work was discontinued after about 100 cubic yards had been excavated. It was found that in the soft material below the frost, about 150 cubic yards could be removed per day, at a cost of about $24.

The expenditure for the fiscal year ending March 31, 1908, was $3,500.

CAMPBELLTON.

Campbellton, Restigouche county, is situated on the southern side of the Restigouche river, 16 miles above Dalhousie and six miles below the head of the tide. It is an important station on the Intercolonial Railway and the terminus of the International Railway now under construction. Its population in 1906 was 3,740, against 2,652 in 1901.

Between 1889 and 1892, a departmental wharf was constructed at Campbellton, extending 250 feet easterly from what was lately known as the Shives wharf. The expropriation of the latter increased the frontage of the government wharf to 340 feet.

In October, 1904, a contract was entered into for the construction of a deep water wharf, 304 by 35 feet, on a foundation dredged to 22 feet at low water, extending easterly from the original departmental block. This was completed in September, 1906.

For local traffic, especially that of the Interprovincial Navigation Company, a contract was entered into, on February 28, 1906, for a wharf, 200 feet long, and 75 feet wide, with 9 feet at L.W.O.S.T. at the outer face, to be built as a western extension to the departmental wharf. This was completed on September 8, and a cribwork, 258 feet long and 15 feet wide, on top, was built by day labour during 1905-6, as a new westerly face of the departmental wharf and to give access to the new western extension; the original approach to the wharf being altogether too narrow and often blocked with rail and other traffic.

During 1906-7, the space between the new cribwork and the old wharf was filled with earth, bark, brush, &c., adding an area 258 feet long and from 15 to 48 feet wide to the government property, and the top was surfaced and graded during the fiscal year 1907-8.

During the same fiscal year, 1907, a cribwork, 148 feet long, was built on the easterly side, to enable a second railway siding to be laid out to the deep water wharfs; the old wharfs were built up on their remaining faces and graded inside at the general level of 4 feet above H.W.O.S.T.

In the fiscal year ending March 31, 1908, an extra face timber and cap, 140 feet long, and the upper lengths of fenders were added on the outside face and grading over the interior was continued to complete this work. An extra cap timber and inner face timber, 148 feet long, were placed over the cribwork, under the railway siding, to bring it to full height. About 2,300 cartloads of bark, earth, ashes and gravel were used for grading during April to November, 1907.

On February 11, 1907, the construction of a warehouse was begun on the western extension. The building is 110 feet long and 40 feet wide, with side walls 16½ feet high and a pitched roof with sides sloping at the rate of one to one, supported on eight trusses of 40-foot span. By March 31, the building was ready for shingling (on the sides), for the asphalt roofing, and the 2-inch flooring was laid.

It was completed during 1907-8, painted, and wired for electric lights. One corner, 14 by 11 feet, was boarded in and sheathed for use as an office. Later in the season, the roof was coated with roofing tar. A moveable slip was built, to be raised by winches and concrete counter-weights, for the transfer of freight from the warehouse to vessels.

Fifteen thousand F.B.M. of planking was laid between the rails of the two tracks, on the deep water wharf, and planks were bevelled to the level of the old floor, outside the rails, to allow teams to drive and turn on the wharf.

The pile driver was repaired and the outer face and end of the departmental block, built in 1889, was close-piled with 87 piles, 40 to 54 feet long, to protect the face and enable dredging to be carried on safely to 25 feet at low water. Towards the end of March the same class of piling was begun along the inside face, and about 35 piles were driven before the close of the fiscal year.

The expenditure for the fiscal year ending March 31, 1908, was $6,655.02.

OLD FERRY WHARF.

To provide a landing for the ferry steamer plying between Campbellton and Cross Point, Bonaventure county, P.Q., the department, between 1889 and 1894, constructed a ferry wharf, 406 feet long, on a site selected by the town council. This has not been used for some years as a ferry landing, as the site was unsuitable, and a new landing, giving only sufficient room for the ferry boat, has been built elsewhere.

The old wharf is, however, much used by boats from the surrounding districts, both of Bonaventure and Restigouche counties, and as it was in bad condition and the outer end had been carried away, repairs were undertaken by the department in the spring of 1906. Previously, the inner 250 feet of the wharf had been filled with earth, &c., by the town council, to make it passable for teams.

During 1905-6, the remains of the old planking were removed, new 10-inch by 10-inch cap timbers and ten new fenders were placed along the sides, two old spans were logged up at the sides, and the interior, for 100 feet near the outer end, as well as parts of the inner sections, were filled and surfaced with cedar bark, clay and gravel.

During the fiscal year 1906-7, these repairs were continued; the outer 55 feet of the wharf was built up and levelled with new cribwork, which at the end is 10·8 feet high, giving the wharf a total length of 373½ feet, filled with stone, bark and gravel; 12 fenders, two ladders and six ring-bolts were placed.

An old block, 84½ by 11 feet, at the northwestern corner of the ferry wharf, was also repaired. The cribwork was strengthened by the insertion of new timbers and by extra bolting; the interior was filled with stone, bark and earth, and surfaced with gravel; a cap, six new fenders and 18 feet of new sheathing were placed around the work.

During 1907-8, the eastern side of the wharf was sheathed with three-inch plank, and the interior, where settlement had occurred, was surfaced with 300 loads of gravel, about 150 cubic yards.

The expenditure is included in that given at the end of the Campbellton report.

CAPE TORMENTINE.

Cape Tormentine is situated on the southwestern side of Northumberland strait, at the extreme eastern end of Westmoreland county. It is the terminus of the New Brunswick and Prince Edward Island Railway, and the nearest point of communication between Prince Edward Island and the mainland, there nine miles apart.

To form an artificial harbour for purposes of interprovincial communication between the island and the mainland, a breakwater pier was constructed by the department between 1886 and 1892.

The structure comprises a straight pier or approach, 2,500 feet long (the first 1,300 feet which is a rubble mound and the remainder close-faced cribwork) and a pierhead and 'return,' each 400 feet long, of close-faced cribwork. The outside faces of the head and 'return' were, from about low water level to the top of the work, built with a slope of one to one which was sheathed with hardwood. The whole

incloses a harbour with an area of about 4 acres and a depth, up to the autumn of 1892, of 13 to 15 feet at low water, but which has since been increased in parts to 18 feet by dredging.

Spring tides rise 7¾ feet, and neaps 3¼ feet.

Owing to the ravages of the teredo, repairs became necessary to the timber section of the work soon after its completion and have since been carried on annually. They consisted up till 1901, mainly of renewing the face-timbers and sheathing of the sloping faces of the pierhead and 'return' and protecting the north and a portion of the south faces of the approach, and about 300 feet of the outer face of the pierhead with large and small stone, which was in progress up till 1906, and driving hardwood close-piling along a portion of the inside of the approach and, later, creosoted 12-inch by 12-inch piles about 2½ feet apart around the harbour side of the work.

In 1901-2, a temporary quay face, 205 feet long, was constructed of piles, hardwood walings and cross-ties, along the outer or south face of the 'return,' for the winter steamer service between Prince Edward Island and Cape Tormentine. A combined station and freight shed, 100 feet by 20 feet, was built on the 'return.'

Ever since, repairs and improvements have been made, the details of which are fully given in annual report of 1906-7.

During the fiscal year ending March 31, 1908, the strip of hardwood sheathing was widened and extended to cover a total area 194½ feet long and 8 feet high.

Thirty-one creosoted piles were driven along the quay face, the interior was filled with stone, and the covering was laid.

One hundred and nine feet of the vertical face built in 1905-6, along the 'return,' was close-piled with 12-inch by 12-inch creosoted timber, 93 piles were driven, and the interior was partly filled with ballast and covered.

The shore end of the 'return' had settled, in consequence of the hardwood timber with which it was sheathed having been destroyed by the teredo, the remains of the hardwood were therefore removed, 11 creosoted piles were driven at one corner and protected with 7 iron straps. The interior was levelled and filled with ballast, the covering was laid for an area 30 by 30 feet, and a mooring post was re-set. About 100 creosoted piles, along the harbour side, were rebolted to the work.

Five creosoted piles were driven in the pierhead, to continue the close-piling of the vertical face, built in 1903-4.

The freight shed, which was damaged in the storm of November 7, was repaired, it required new doors and glass in the windows and repairs to walls and partitions.

The pile driver and trolley were rebuilt, the scow and hoisting engine were repaired and a new boiler procured for the hoisting engine, and, at the end of the season, the engine, pile driver, &c., were taken from the pier to the yard, and the lumber on hand was piled.

The expenditure for the fiscal year 1907-8 was $5,174.09.

CARAQUET.

Caraquet, county of Gloucester, is situated on the south side of Baie des Chaleurs, 42 miles east of Bathurst. It is an extensive and prosperous fishing village and settlement, with a population of about 4,000 and, with the exception of Bathurst, is the most important station on the Caraquet Railway

In March, 1902, a contract for a deep water wharf, for the shipment of lumber from Gloucester county, was entered into with Messrs. Simmons and Burpee, of Gibson, N.B.

The wharf is built of round timber in open cribwork It is 1,700 feet long and consists of a shore block, 255 by 25 feet; 25 blocks, 25 feet square; 26 spans of 20 feet, and a pierhead 300 by 40 feet. The latter rests on a foundation which was dredged by the department in 1903 to 22 feet at low water. The contract price was $59,990. The wharf was begun on July 7, 1902, and completed on October 31, 1905.

During the fiscal year 1905-6, two ice breakers, 20 feet square on top, were built as a protection to the blocks of the wharf, and some slight damage to the pier-head caused by ice was repaired.

The work of grading and fencing a right of way, 1,200 feet long, from the wharf to the public road, was begun in June, 1906, and completed in November of that year. The total excavation amounted to about 2,300 cubic yards.

To protect the pierhead from the ice, which at times moves in large fields from Upper Caraquet harbour, under the influence of the strong ebb tide and northwest winds, a third ice-breaker was begun on October 1, 1907. As the water is deeper and the current at the end of the pierhead stronger than at the site of the two first blocks, the new ice-breaker is made 20 by 25 feet on top. In the direction of the ice run, it has a slope, 25 feet wide, of 15 feet horizontal in 12 vertical, and the outer end has a batter of one in four for the upper 12 feet. On the remainder of the work the batter is one in eight. The upper 12 feet is sheathed with 6-inch hardwood. The work was discontinued on November 21, and resumed on March 23. By March 31, the round timber work was completed, the block filled with ballast and the placing of the sheathing was begun. The work was completed on April 8.

The expenditure for the fiscal year ending March 31, 1908, was $2,105.49.

CHATHAM.

Chatham, Northumberland county, one of the chief deal ports of New Brunswick, lies on the southern shore of the Miramichi river, about 20 miles from the mouth. It has a population of about 5,000.

The Custom House wharf, so-called, an old structure, was rebuilt during the fiscal years 1899-1900 to 1901-2. It has a frontage of 112 feet on the river and two wings, 144 and 171 feet long, all composed of close-faced cribwork, 12 feet wide. The area between the wings is filled with earth and gravel.

During September and October, 1907, a cribwork retaining wall, 52 feet long and 6 feet high, was built at the inner end of the slip, on the eastern side of the wharf, and the ground was levelled off and filled in behind it. A total of about 10,000 square feet of the government property was graded and 12 trees were planted. The cap, fenders, and mooring posts of the wharf were painted with creosote.

The expenditure amounted to $193.84 for the fiscal year 1907-8.

CHOCKFISH.

Chockfish, Kent county, is a fishing and farming settlement at the mouth of the Chockfish river, which empties into Northumberland Strait, about midway between Richibucto and Buctouche.

The works at Chockfish are intended to straighten the channel at the mouth of the river, formery obstructed by shifting sand and bars, to render it deep and stable, and thus afford a safe entrance and harbour for fishing boats. They consist of a dam, closing the old deflected channel, and north and south breakwaters. The dam is 356½ feet long. It was begun in 1901-2 and extended in 1902-3. The north breakwater was built for a length of 516 feet in 1903-4, and extended 50 feet during 1906-7. The south breakwater, begun in 1904-5, has a total length of 264 feet, of which the outer 50 feet was built in 1906-7. It is a continuation of the dam. An opening 44 feet wide is left between the two breakwaters.

Further extensions of 50 feet were built at either side during the fiscal year 1907-8, and about 200 feet of the old works, on each side, were refilled with brush and stone. The outer sections of both breakwaters are 11 feet 6 inches, out to out, and consist of two rows of main piles, placed six feet apart, centre to centre, in each row, and connected with cross-ties and walings of square timber. They are close-piled, both outside and inside, and filled with brush and stone.

The expenditure for the fiscal year ending March 31, 1908, was $1,499.39.

DALHOUSIE.

Dalhousie, Restigouche county, lies at the head of the Baie des Chaleurs, and at the mouth of the Restigouche river, 16 miles below Campbellton. It has a population of about 1,200, and is an important deal port. Dalhousie harbour is one of the best in the province, being well sheltered and having a depth of from four to seven fathoms at low water.

At the terminus of a branch of the Intercolonial Railway the department constructed in 1887, a wharf 300 feet long, 22 feet wide on top, and giving a depth of 14 feet at low water. This depth has since been reduced through ballast having been washed out of the work.

On August 1, 1904, a contract was entered into with J. B. McManus, Ltd., for the construction of a deep water wharf, 304 by 35 feet, built on a foundation dredged to 24 feet at low water. This work lies immediately above the old government wharf. The contract price was $42,000.

In August, 1905, the dredging required under the contract was performed, and on January 22, 1906, the cribwork was begun. The wharf was completed on October 18, 1906.

On January 8, 1907, work was begun on a connecting block between the old and new works. An opening of 20 feet is left between the deep water wharf and the block, spanned with 12-inch by 12-inch stringers and 4-inch coverings. The block is of round timber cribwork with double-face timbers and close-piling on the exposed faces. Its inner side is contiguous with the old work throughout. It is 220 feet long and 56 feet wide at the upper end, decreasing in width to a point at the lower end to give, with the deep water wharf, a straight face of 550.

Dredging by the *St. Lawrence*, on the site of the new block in the season of 1905, produced a depth of 17 to 20 feet at low water along its face.

By March 31, 1907, the block had been built to an average height of 1½ feet above high water.

During the construction of the connecting blocks, the old government wharf was raised and levelled at 4 feet above H.W.O.S.T., by the addition of cross-ties, stringers and covering, and the whole was completed on August 13.

The run of ice in the spring of 1907, damaged the face-timber and fenders at the northwest corner of the deep water wharf. During September, the damaged sticks were replaced with hardwood fenders, and the spaces between the fenders across the end of the work were sheathed with 10-inch hardwood. Three iron plates, 2 feet by 8 feet by ⅝ inch, bent in the middle lengthwise, were placed around the corners

DALHOUSIE (FERRY WHARF).

Dalhousie ferry wharf, built by the local government in 1892, at a cost of $2,217.48, besides accommodating the ferry steamers running to Campbellton and different points on the Quebec shore, is much used by schooners and fishing boats as the cove or basin, in which it lies, forms a safe and convenient harbour. This basin was in part dredged by the *St. Lawrence* to a depth of about 12 feet at low water, during the season of 1905. The wharf is 591 feet long, and composed of block and spans 15 feet wide, and a pier-head 52 by 26 feet.

It was too small and had lately been so much out of repair as to be useless; a contract for rebuilding and enlarging it was entered into on November 14, 1907, with Messrs. J. and A. Culligan.

The new work will have a total length of 630 feet, including an earth and stone approach, 80 by 20 feet, a cribwork approach, 100 by 20 feet, 9 blocks and 10 spans, 20 feet square, a slip, for the ferry steamer, 50 by 15 feet, inclined at the rate of one in five, and a pier-head 70 by 41 feet. The contract price is $9,840.

The work of removing the old blocks was begun on November 28, and by March 31, 1908, the round timber work of the shore block and block No. 1 had been built to full height, of blocks 2 to 9 and of the slip to different heights up to within 2 tiers of the top. The old timbers of the pierhead had been removed down to high tide level and one to three tiers of new timbers were laid over it, the main piles for the enlargement of the pier-head had been driven.

The total expenditure during the fiscal year ending March 31, 1908, for harbour improvements at Dalhousie amounted to $22,348.79.

DORCHESTER.

Dorchester is the shire town of Westmoreland county, and a station on the Intercolonial Railway, twenty-seven miles southeast of Moncton. Its population is about 1,100. It lies on the eastern side of the Memramcook river, about two miles above the mouth in Shepody bay.

About thirty or forty years ago, a pile wharf, 200 feet long, was built as an extension to the railway cribwork wharf, for the shipment of coal from the Springhill mines; but on the construction of the Springhill and Parrsboro Railway, that traffic was diverted to Parrsboro, and the pile wharf was allowed to fall into decay.

Of late years, however, on account of the increase in the lumber business, &c., the single berth, that at the railway wharf, has not given sufficient accommodation and an extension to the present wharf is therefore required.

The work as proposed will be 200 feet long by 50 feet wide, and lies immediately below the present wharf, but 24 feet inside the range of the outer face of the latter, so that vessels lying at the new wharf may discharge long lumber from the bow ports directly on cars on the old wharf. At present, long lumber has to be hauled out into the river and then hoisted on the wharf. Along the outer side of the new wharf, a bed for vessels is required, to be built of cribwork, 29 feet wide.

On January 20, 1908, a contract for this work was entered into with Messrs W. & O. Downey, the contract price being $13,478.

The expenditure for the fiscal year of 1907-8 amounted to $151.87 for preparing plans, calling for tenders, &c.

DURHAM.

Durham, the most easterly parish of Restigouche county, has a population of 2,200, occupied in lumbering, farming and fishing.

For the protection of the fishing boats and to facilitate the shipment of lumber, a contract for a breakwater was entered into on June 20, 1905, with Messrs John and Joseph Goulet. On October 23, 1905, the contract was transferred to Messrs. J. & A. Culligan. The contract price was $17,700.

Work was begun on September 1, 1905. The breakwater was completed on September 22, 1906, and has a total length of 702 feet. It is constructed of round timber cribwork, sheathed, except for the inner 70 feet of the approach, with 4-inch hardwood planks. The approach is 20 feet wide. The pier-head is 30.4 by 48.5 feet, and is placed crosswise with the approach.

During 1906-7, a short pier or groyne was built outward from the shore, at a point 300 feet easterly of the first work, to give protection from easterly winds to boats lying at the latter, and to retain the littoral drift. It is 124½ feet long and 12½ feet wide, the inner 38 feet are of earth work and the outer 86½ feet of cribwork similar to the breakwater.

During 1907-8, $177.10 was expended in clearing the wharf of logs, seaweed, &c., with which it was twice covered for a length of about 250 feet during heavy storms and extreme high tides.

EDGETT'S LANDING.

Edgett's Landing, in Albert county, is on the west side of the Petitcodiac river, two miles below the village of Hillsborough.

To replace an old provincial government work, destroyed by the Saxby gale, in 1869, the construction of a wharf was begun twenty years later by the department, and was finally completed in the fiscal year ended June, 1893. The wharf is 400 feet long, composed of an earthen approach, 20 feet wide and 50 feet in length, round timber cribwork, 250 feet, and square timber cribwork, 100 feet long. The head is 40 feet wide. Spring tides rise 40 feet. The pier-head, 35 feet high, stands in 30 feet at high water, and is dry at low water.

Renewal of the covering, which had become decayed, and levelling up of the stringers, which had settled, was begun in May, 1900, and was completed in 1900-1.

During the fiscal year 1903-4, the approach, 270 feet long, was raised above tide level with brush and gravel, protected on each side by stone. Thirteen broken cross-ties were replaced with new ones, 12 feet in length; slight repairs were made to the covering, and two new mooring-posts, 15 inches in diameter, were placed in position.

In 1904-5, the upper works having become decayed, the outer block, 100 feet long and 40 feet wide, was pulled down and rebuilt for three tiers in height; the next stretch of 100 feet was also pulled down and rebuilt (excepting the top cross-ties) for the same height.

In 1905-6, these repairs were carried over the whole work, and the reconstruction of the top was completed.

During 1907-8, the cribwork retaining wall, 200 feet long and 60 feet wide, was completed and ballasted; while the mud-bed was about half made.

The expenditure during 1907-8 amounted to $2,662.05.

GREAT SALMON RIVER.

Great Salmon River, St. John county, is a small tidal inlet, eight miles east of Quaco. Shipments of lumber are made from this place to St. John.

A contract for the construction of a breakwater, 180 feet long and 18 feet wide on top, for the protection of the entrance to the harbour, was signed on July 27, 1905, and by October, 1906, the work was completed.

Another contract was let for the extension of this work, on November 27, 1907, but it had not been begun by the end of the fiscal year

Expenditure during 1907-8, $91.89.

HOPEWELL CAPE.

Hopewell Cape, in Albert county, near the mouth of the Petitcodiac and at the head of deep water navigation, is one of the several works intended for convenience of shipping in that large tidal river. Spring tides rise 45 feet.

For the use of vessels proceeding to Moncton, Hillsborough and Dorchester for cargoes, the department, in 1883, began the construction of a ballast wharf of round cribwork, 300 feet long and 22 feet wide, which was completed in the following year.

In 1885, the work was extended to the present length of 583 feet, by an addition built of square timber.

In 1901, the construction was begun, by contract, of a new wharf, intended to be 460 feet in total length, consisting of an approach of round cribwork, 210 feet long, with square cribwork, 250 feet long, which includes a pier-head, 50 by 35 feet on top and 48 feet high. By July 1, 1902, the cribwork and trestling of the approach had been built and the pier-head had been brought up to the 15th tier, and the square cribwork had been extended to a total length of 210 feet.

During the fiscal year 1902-3, the work was brought up from the 15th to the 46th tier or to the top, and the wharf was completed. As spring tides rise 45 feet, a movable slip was, by request, placed on the pier-head for convenience of traffic at the varying stages of the tide. Brush and stone protection was also applied to the outside of the pier-head, the soft bottom of the Petitcodiac having scoured by action of the current. Some boulders, scattered among the mud of the foreshore, where vessels lie at low water, were removed.

In 1906-7, two brush mattresses, from 4 to 4½ feet thick, well ballasted with stone, were laid to prevent scour to the new wharf, a result which was successfully accomplished.

In 1907-8, five ring-bolts and two ladders were placed on the wharf, and the cleats of the movable slip and the hand-rail of the steps were renewed.

It was besides intended to divert the drainage at this wharf, but winter came on before it could be done.

The expenditure during 1907-8 amounted to $72.91.

HOPEWELL HILL.

At Hopewell Hill, Albert county, on Shepody river, an arm of the Petitcodiac, a contract was let in 1900-1 for the erection of a new public wharf of round cribwork. Construction was commenced in June, 1901, and the work was completed in November of the same year. The wharf, 101 feet in total length, consists of a stone approach 24 feet long and 30 feet wide on top; two blocks, each 20 by 40 feet, and two intervening spans of 15 feet. The blocks are of open cribwork, planked on top, and fendered on the sides.

In the fiscal year 1902-3, the right of way to the wharf, 66 feet wide, was acquired, and a road 500 feet long and 20 feet wide on top, composed of alternate layers of brush and clay was built. The road, which is outside the dykes, is altogether in embankment, the fill being 10 feet in maximum depth. The work comprehends 2,216 cubic yards of brush and clay in about equal parts. In the deepest part of the filling, a culvert 32 feet long was built.

In 1903-4, a bed for vessels to ground upon at low water, 73 feet long, 25 feet wide and 10 feet high at the outer end, was made of cribwork, brush and clay on the lower side of the wharf.

In 1904-5, the top of the outer block, and of the adjoining span, which had settled, was built up level, and a bed for vessels, along the front of the wharf, was built to a height of eight feet.

Owing to the pressure of ice, the pier-head had again settled, and in 1907-8, to prevent further damage from this cause, the span, between the pier-head and shore block, was filled in with cribwork; the pier-head was levelled, and the approach was made up with brush, poles and clay. The bed for vessels was also raised one tier, at the outer end, and levelled.

The expenditure during 1907-8 amounted to $992.80.

L'ETANG.

L'Etang, in the county of Charlotte, is one of the best harbours on the coast of New Brunswick, and according to the Admiralty 'sailing directions,' one of the most convenient in North America, in point of entrance, capacity, shelter, depth and holding ground. The harbour is famous for sardines. Spring tides rise 23½ feet.

In 1899, the department extended the provincial government wharf of block and span work, by building a pier-head 30 feet long, 20 feet wide and 25 feet high, standing in 20 feet at high water.

During the year 1904-5, the second block of the old part of the wharf was raised by the addition of three cross-ties and as many longitudinals. Five rows of new stringers were laid for a distance of 60 feet; the fourth block was raised by the addition of one cross-tie; new covering was laid for a distance of 83 feet, and the old covering was re-laid a distance of 31 feet. The bents of the trestle approach to the pier-head were repaired by the renewal of five posts and the addition of 20 fenders.

In 1907-8, a length of 30 feet of this wharf was taken up and entirely rebuilt; the whole of the covering was taken up and renewed; new stringers were placed in every span; the trestle work was braced and a new ladder was made.

The expenditure during 1907-8 amounted to $400.95.

LOGGIEVILLE.

Loggieville, Northumberland county, with a population of about 600, is situated on the southern side of the Miramichi river, six miles below Chatham; it is the terminus of the Fredericton branch of the Intercolonial Railway.

In 1901, the department constructed a wharf, consisting of a stone approach, 175 feet in average length and 20 feet wide on top; a span of 15 feet, and a pier-head of close-faced cribwork, 40 by 25 feet. This work lies immediately below the so-called 'Bentley's wharf,' and projects 49 feet beyond the face of the latter.

The Bentley wharf and a right of way from the public road were acquired by the department in the winter of 1903-4, and during 1904-5, work was in progress on the construction of a pile wharf, to fill the corner between the two wharfs, and of an approach from the public road; on repairs to the Bentley wharf, and in raising the original departmental wharf to the level of the new work.

During the fiscal year ending March 31, 1908, the inner or southwest side, between the inner end of the 'Bentley wharf' and the approach, which was previously very low and overflowed by high tides, was built up with cribwork, consisting of four tiers of round timber with stringers and cap, for the total length of 153 feet. A short section of the interior, next the approach, is planked and the remainder is surfaced with about 320 loads of gravel laid over ballast poles.

The expenditure for the fiscal year 1907-8 was $399.02.

LORD'S COVE.

Lord's Cove, Charlotte county, a small fishing station on Deer island, is a port of call for steamers plying beween St. Stephen, St. Andrew's, Eastport and other points in Passamaquoddy bay. To afford landing facilities, the construction of a wharf was begun in 1900-1.

Spring tides rise 24 feet.

The wharf, without the approach, is pile and trestle work, 328 feet long and 21 feet wide, with a pier-head 33 feet in height.

During the fiscal year 1902-3, this wharf was extended to the back of the pier-head, a length of 120 feet, by driving 12 bents and by completing the laying of the covering and the cap. A gallows-frame, ladder and flight of steps were also made, in order that the public might make immediate use of the wharf. The work was then 289 feet long, exclusive of the stone approach, 28 feet in length.

In 1903-4, the pier-head (50 by 40 feet) was built, to which 17 fenders and 58 short braces remained to be applied. The work was then 328 feet long and 21 feet wide, with a pier-head 35 feet in height. The wharf is approached by a stone embankment, 28 feet long and a rock cutting 61 feet in length.

In 1904-5, the materials for a movable slip were ordered, and in 1905-6, the slip was almost finished.

In 1906-7, the gearing was placed, the slip was completed and all the pile fenders, except three, were driven at the end of the pier-head.

In 1907-8, thirty-eight fender-piles were driven around the end of the wharf, and secured; broken piles, walings and braces were renewed; two new ladders, 26 feet and 15 feet, were built in place of the old one; the movable slip was completed, and the framework, top of piles and hand-rail were painted.

The expenditure during 1907-8, amounted to $241.54.

LOWER NEWCASTLE.

Lower Newcastle, Northumberland county, is a farming and lumbering district on the north shore of the Miramichi river, opposite Loggieville and eleven miles below Newcastle.

To provide a landing place for the river steamers, the construction of a wharf was begun in August, 1907, and by the close of the fiscal year had advanced as follows: A stone approach, 16½ feet wide and 70 feet long on the centre line, with cap timbers at the side secured to cross ties, was nearly completed; a shore block, 40 by 20 feet; span of 15½ feet; block, 20½ by 20 feet, and span of 16 feet, required only a part of the cap timber; the pier-head, 31 by 41 feet, required the covering, cap and part of the ballast and fenders. The total length is 193 feet.

The expenditure for the fiscal year 1907-8, $2,901.81.

MILLS POINT.

Mills Point, Northumberland county, is situated on the southern side of Miramichi bay, seven miles eastward of Bay du Vin. It is protected from the main Miramichi bay by Nin, Egg, Fox and Huckleberry islands, inside which is Lower Bay du Vin, forming an inner passage about ten miles long to Escuminac. Mills Point lies at the eastern end of navigation (for the river steamers) in this passage, the five miles (by water) between the Point and Escuminac being used by small fishing boats.

The Point is central for a good farming district and for the oyster fishery of Bay du Vin, the catch from which amounts to about 2,000 barrels per year, and easily accessible for the large fresh and canned fish industries of the islands and Escuminac.

On February 6, 1908, the department entered into a contract with Mr. A. F. Fawcett for the construction of a wharf at Mills Point, which will be 1,330 feet long and consists of an approach, 20 by 135 feet; 25 spans, 20 by 20 feet; 24 blocks, 20 by 25 feet; 1 block, 30 by 25 feet; 1 span, 30 by 20 feet, and a pier-head, 30 by 50 feet.

A quantity of lumber was obtained for the work during the winter, but construction had not begun at the close of the fiscal year.

The expenditure during the fiscal year ending March 31, 1908, was $149.78.

MISPEC.

Mispec, county of St. John, about eight miles east of St. John harbour, is a narrow tidal inlet in the rocky coast of the Bay of Fundy, at the head of which a pulp mill has been built. Two piers protect the entrance of the harbour; both are of square cribwork. The west pier, built in 1885, is 196 feet long, 20 feet wide on top and 29 feet high; the east pier, built in 1901, is 168 feet long, 34 feet wide and 30 feet high.

Spring tides rise 25⅓ feet.

On May 6, 1907, a contract was let for the extension of the east pier. The timber is being procured, and the work will be begun in the spring, the contractor having obtained an extension of time.

Expenditure during 1907-8, for preparation of plans, calling of tenders, &c., amounted to $41.96.

MONCTON.

Moncton, Westmoreland county, is the second among the cities of the province; it is the headquarters of the Intercolonial and of the Moncton and Buctouche railways. It lies on the north side of the Petitcodiac river, 20 miles from the mouth in Shepody bay.

According to the census of 1871 the population of Moncton was then 600; by 1901 it had increased to 9,026, and with the building of the new Intercolonial Railway shops and of the Grand Trunk Pacific Railway, which will make Moncton its eastern terminus, the increase in growth is certain to continue.

The public wharf at Moncton has a frontage of only 90 feet. To accommodate the schooner traffic and for the shipment of deals, it is proposed to extend the wharf to give a total length of 250 feet.

Tenders for this extension were called for by the department towards the end of 1907-8.

Expenditure incurred for preliminary work during 1907-8 amounted to $125.45.

NEGRO POINT.

Negro Point, St. John county, is a headland about 60 feet above high water mark at the western entrance of St. John harbour, which is formed by the estuary of the River St. John on the northern side of the Bay of Fundy. Spring tides rise 25·33 feet, neaps, 15 to 20 feet.

In addition to convenience of position for distribution, by rail, of cargoes landed at the city of St. John, the harbour is remarkable principally for great tidal range, and for consequent freedom from ice in the winter months. The harbour is open, broadly speaking, from southeast to southwest, but southerly waves are broken by Partridge island, and southwest waves are mitigated by Negro Point breakwater, while the 'Foul Ground,' a shoal tailing down from the peninsula on which the city is built, must have more or less effect in moderating the force of the easterly seas rolling around Mispec Point.

By Partridge island, a rocky eminence devoted to quarantine and lighthouse purposes, the entrance of St. John harbour is divided into east and west channels. In the former or main channel, a minimum navigable depth of 19 feet is found on the bar at low water at ordinary spring tides. Two hundred yards inside the crest of the bar, a depth of five fathoms is obtained in the narrow fairway, while higher up and between the most southerly of the principal wharfs on either side of the harbour (450 yards wide at that point), twelve fathoms are given in midchannel. The west channel, 10 to 14 feet deep at low water, and originally 1,200 yards wide, has been contracted to about as many feet in breadth by Negro Point breakwater, which extends 2,200 feet S.E. by S. from the headland so styled.

The reasons for undertaking this work are thus stated in the reports of Minister of Public Works for 1875 and 1882.

'1875.—This breakwater extends southeasterly from Negro Point at the western entrance of St. John. When completed it will extend a distance of 2,250 feet, closing up the west channel to that extent, leaving, however, a width of 1,465 feet between the outer end and Partridge island. The object is to break the force of the seas which roll into the harbour of St. John during the southwest gales in the Bay of Fundy, and which render it dangerous and almost impossible at such times for vessels to make the harbour.'

'1882.—Southwesterly winds threw in a heavy sea through the western channel which rendered it difficult for vessels to make the harbour, as they were in danger of being carried on the "Foul Ground" on the eastern side of the channel. In the spring of 1875, a breakwater 2,250 feet long, to partially close the western channel was begun, and in September, 1877, completed'

Reference to the chart will show that as long as the present opening remains, the object of the breakwater has been only partially fulfilled. In dealing with the reduction of the bar, a more cogent reason than improvement of shelter may be found for the extension of the work to Partridge island.

The breakwater consisted, at first, of a cribwork core, 30 feet wide at the base, and 15 feet wide at the top (5 feet above high water ordinary tides), protected on both sides by large stones, sloping to seaward at the rate of two to one and landward at the rate of one to one. In the month of February, 1879, thirteen hundred lineal feet of cribwork were swept away to a depth varying between 13 and 19 feet from the top, the stones having been raked down by the wave-action to a slope more nearly resembling the angle of repose of the material. In 1880, temporary repairs were made, and in 1881, a contract, completed six years afterwards, was entered into, whereby the lost cribwork was replaced by heavy stones and the seaward slope made three to one. Even this flatter inclination proved too steep for stability; consequently, notwithstanding their size, the stones, though smoothly laid, were soon displaced by the sea. A length of 50 feet of the breakwater, extending at full height beyond a masonry pier, built under the same contract, to support a beacon, was also swept away. From 1891 to 1894, desultory repairs were made by the addition of large stones, chiefly deposited about the end to prevent the lighthouse from being undermined.

In 1895, the department began the work of reinforcing and reconstructing this breakwater with large granite blocks and cement concrete. This work has been carried on every year since, except 1896-7, and details of operations may be found in annual report of 1906-7.

In 1907-8, 14 large blocks of concrete, aggregating 590·6 cubic yards, were made in place; the inshore landing was rebuilt and widened; 300 barrels of sand were hauled from the beach and placed in the warehouse; 50 bags of concrete were placed under blocks, formerly built, where undermining had taken place; the beach was cleared of stone at both landings and repairs were made to tools and plant.

The total expenditure to the 31st of March, 1907, amounted to $586,758.41.

The expenditure during 1907-8 was $3,752.46.

NEGUAC.

Neguac, Northumberland county, lies on the eastern side of the inner Miramichi bay, 27 miles northeast of Chatham.

Between 1892 and 1894, the department constructed a wharf, 1,180 feet long, with a depth, at the outer end, of five and one-half to six feet at low water.

An expenditure of $5 was made during 1907-8 for replacing a broken fender, 14 feet long and 10 inches square, on the pier-head.

NORTH HEAD.

At Flag Cove, near North Head, in Grand Manan, an island forming part of the county of Charlotte, and lying 24 miles south of St. Andrews, but double that distance from St. John, a wharf known as Dixon's, was purchased by the department.

In 1906-7, a little ballasting was done. On June 11, 1907, a contract was let for an extension to this wharf. Work of construction was begun in the same month.

By the end of 1907-8, two cribs had been sunk in place, and had been extended shoreward to Dixon's wharf, the whole substructure of the new work being built up to an average height of 3½ feet below the foot of the sloping face.

A new trestle approach was made to the old wharf, 95 feet long, and 33 feet wide; also a cribwork protection, ballasted with stone, 68 feet long and 14 feet wide.

The expenditure during 1907-8 amounted to $13,621.55.

On February 1, 1908, a heavy storm carried away the greater number of wharfs at North Head, including Dixon's wharf, and damaged the outer end of the new trestle, removing three bents.

OAK POINT.

Oak Point, Northumberland county, is situated on the north side of the Miramichi river, 11 miles below Chatham.

To provide a landing place for the river steamers and shipping facilities for the district, a contract was entered into, on October 23, 1906, with Mr. T. P. Charleson, for the construction of a wharf.

Construction was begun on June 8, 1907, and completed on February 10, 1908.

The wharf, as built, is 481 feet long, consisting of 10 blocks 20 feet square, 11 spans of about 20 feet, and a pier-head 51 by 30 feet. The sides of the blocks and sides and end of the pier-head are sheathed with four-inch hardwood plank. The contract price was $7,200.

The expenditure for the fiscal year ending March 31, 1908, was $7,806, including $606 for inspection.

PARTRIDGE ISLAND.

Partridge Island Waterworks (St. John).—In order to furnish Partridge island, the lighthouse and quarantine station at the entrance of the harbour, with a water supply, an agreement was made with the corporation of St. John, whereby it extended the pipe line, in 1904, from St. John street to H.W. mark, below Fort Dufferin. The work was completed in November of that year. The department paid $4,067.74, being three-quarters of the cost, the corporation doing the work of construction and continuing to maintain that part of the pipe line.

On Partridge island, the department, in that year, excavated 2,032 lineal feet of standard trench, almost entirely in rock. Three thousand six hundred lineal feet of 6-inch extra heavy galvanized wrought-iron pipe were purchased, together with 202 flexible ball joints. Two thousand three hundred lineal feet of cast-iron pipe were also delivered, together with six valves and the same number of tees and hydrants.

In 1905-6, 946 lineal feet of cast-iron pipe were laid, together with 3,253 lineal feet of wrought-iron pipe, with flexible joints, which were laid under water across the west channel of the harbour of St. John. The water was turned on in February.

In 1906-7, 1,719 lineal feet of trench were excavated principally in the rock, to the full depth; 2,332 lineal feet of 6-inch pipe were laid, together with 936 lineal feet of service pipe. Three thousand three hundred and thirty-two lineal feet of trench were back-filled; 11 hydrants, 9 gates and 1 blow-off valve were placed.

At the disinfecting house, the pipe was boxed with concrete, 2½ feet square for 30 feet in length. Two concrete retaining walls, both 3½ feet thick, one 18 feet long and 12 feet high, the other 12 feet long and 8 feet high, were built, and all the gates and the blow-off were boxed. The pipes were carried, and connections were made with all the buildings, the medical officer's house and the fog-whistle.

During the severe frost, on February 24, the submerged pipe, which lies on the bottom of the west channel, was found to be frozen. The temperature of the sea water, taken at that time, was 31° F.

In 1907-8, the damage by frost, which occasioned leaks, was repaired by August 15, when the water was turned on. At that date, the schooner *The Sisters,* let go her anchor, fouled the pipe and parted it. The leak was practically stopped in October. On the night of November 7, during a heavy storm, another leak was made, probably by a schooner dragging her anchor. This leak was stopped on November 24. Two small leaks yet remained at the end of the month.

In replacing these leaks, the services of a diver had to be obtained.

On the island itself, the work of laying the pipe was completed, 70 feet of trench were excavated, 120 feet of pipe were laid, and a length of 665 feet of trench was refilled. The trench, throughout the island, was rounded and graded up to protect it from frost; water was taken into three of the buildings, and the under-pinning was built.

A notice board was prepared, cautioning masters of vessels from anchoring on the pipe line. This board was carried away in the storm of February 1. Another notice to the same effect was painted, in large letters, on the masonry of the lighthouse, at the end of the breakwater.

Twenty fenders were placed on the low water landing of the quarantine station, which were capped and braced. A block of cribwork, 43 feet long, 10 feet wide and 6 feet high, was built and ballasted to protect the gate at the shore.

The expenditure during 1907-8 was $8,968.76.

PETIT ROCHER.

Petit Rocher, Gloucester county, is a farming, fishing and lumbering settlement, on the southwestern side of Baie des Chaleurs, twelve miles north of Bathurst.

To afford protection to the fishing boats and vessels trading in Baie des Chaleurs, for which there is no natural shelter in the vicinity, and to facilitate the shipment of lumber, a contract was entered into on May 31, 1904, with Mr. Simon McGregor, for the construction of a breakwater, consisting of a main work 209 feet long on the outer face, and a wing or 'L,' placed at an angle of 74° 30′ with the main part, 160 feet long on the outer face. The width on top is 30 feet. At its inner end the breakwater is 480 feet from the shore. The depth along the inner face varies from 11 to 18½ feet at low water.

In 1904-5, a right-of-way, 860 feet long, from the public road to the shore, was opened up, graded and fenced.

The contract work was begun on March 18, 1905, and by the end of 1904-5, two cribs, 96½ and 41 feet long, respectively, had been built and sunk in place.

In 1906-7 the remaining cribs were built and sunk in place and the superstructure of the main part was carried above high water level.

A large crib was carried away by the ice of March 11, 1906, and, since then, storms and ice have twice made large breaks in the superstructure and have greatly delayed the work.

On March 31, 1908, the top of the superstructure throughout was about 4 feet above high water. There remains the building of a break, 12 feet wide and 5 feet high around the outside of the breakwater, and the placing of stringers and covering on the inside section, 18 feet wide.

To allow of the use of the work as a wharf and to further protect the area inside the breakwater, it is proposed to connect it with the shore by a 45-foot addition to the cribwork and a rubble mound, 450 feet long and 24 feet wide on top, with slopes of large stone close-laid. A contract for this extension was entered into on September 4, 1907, with Mr. Simon McGregor, the contract price being $24,150, and construction was commenced on December 11.

By March 31, 1908, the stone embankment had been built to subgrade, i.e., to 2 feet below the finish top for a length of 371 feet, and stone for the core had been deposited for a further length of 47 feet, about 20 feet wide. The cribwork block had been built 14 tiers high and partly filled with stone.

The expenditure for the fiscal year 1907-8 was $26,983.71.

PINK ROCK.

Pink Rock, Westmoreland county, lies on Shepody bay about twelve miles south of Dorchester.

Large deposits of gypsum crop out on the shore here and are being developed by the Albert Manufacturing Company and the New Brunswick Gypsum Company which have, for the purpose of shipping the plaster, built a wharf, 226 feet long and 26 to 28 feet wide, and excavated a berth along one side so that vessels may lie nearer the shore and save the construction of a long extension.

To give facilities for shipments by tramp steamers and for the general accommodation of vessels trading at the head of the Bay of Fundy, the construction of an extension 75 feet long was begun by the department in 1907, the companies on their part agreeing to allow the public to use their section of the wharf and the government to collect wharfage on it, except from the company's vessels, also agreeing to provide a right-of-way and build a road to the wharf from the public road.

The work was closed down for the season at the end of November, at which time the extension had been built to a height of 19 feet, at a cost of $2,018.71.

POINTE DU CHENE.

Pointe du Chene, Westmoreland county, lies on the western side of Northumberland straits and on the southeast side of Shediac harbour. It is the terminus of a branch line of the Intercolonial Railway; and the steamer *Empress* runs during the season of navigation from this place to Summerside, P.E.I.

The works at Pointe du Chene, consist of two breakwaters, inner and outer, each 600 feet long, with an opening between of 80 feet, and a ballast wharf, 200 feet long, connecting the outer breakwater with the Intercolonial Railway wharf. They have been repaired or rebuilt at various times.

The breakwaters have, except in a newly rebuilt portion, a sloping face which is very difficult and expensive to repair as the rise and fall of the tide is generally so slight, and the timbers at the foot of the slope, above the old creosoted face of the cribs, are continually being destroyed by the teredo.

During 1904-5, 466 cubic yards of large stone were placed along the outer face of the inner breakwater.

In 1905-6, and subsequently, the construction of a stone slope, which had been in progress, to protect the outer face of the outer breakwater, and cribwork blocks, with close-faces of creosoted timber, have been constructed to prevent the stone from passing around the ends.

The block at the outer end, 28 by 30 feet, was built in 1906-7.

During the Thr[illegible] year ended March 31, 1908, hardwood timbers and iron straps were placed around the outer corners to protect the creosoted face from being crushed by ice, and rails were laid over the block, so that carloads of stone could be unloaded in the angle between it and the breakwater.

The block at the inner end, 15 by 20 feet and 16 feet high, was begun in August, 1907, and built only up to about half tide level. It is filled with ballast and covered with poles. 6,577 cubic yards of large and mixed stone have been deposited outside the outer breakwater, of which 1,830 cubic yards were received during 1907-8.

During the past season, four new mooring-posts were also placed in the ballast wharf.

The expenditure for the fiscal year ended March 31, 1908, amounted to $4,999.94.

POINT WOLFE.

Point Wolfe, in the county of Albert, is a small natural harbour on the north shore of the Bay of Fundy, about 57 miles east of St. John. The river mouth gives an indraught from the bay, 18,900 feet long and 700 feet wide. The habour lies at

the upper end of the embouchure, and is formed by a beach or bar thrown up by the sea, 1,000 feet long, 200 feet wide and 14 or 15 feet higher than the flats. The crest of this bar was being washed away by the waves, to the detriment of the basin inside.

A contract was accordingly let in 1900-1, for the erection of protection works, 880 feet in length, intended to prevent further denudation and to effect restoration of the beach to the original height.

Construction of the work, which consisted of pile bents, 8 feet apart, and 11 feet wide, partially filled with brush and stone, designed to collect the littoral drift, was completed in December, 1901. The work answered its purpose in raising and restoring the beach generally, with the exception of a part, 280 feet long, near the shore end, which was washed away, to a depth of 8 feet, and was repaired chiefly with brush and stone in 1904-5.

In 1907-8, a length of 150 feet of the breastwork, on the beach, which had become undermined, was repaired with brush and stone, and a new groyne of piles and planks, 88 feet long, was built with the view of collecting the littoral drift and preventing further damage.

The expenditure during 1907-8 was $491.86.

QUACO.

Quaco, St. John county, is on the northern coast of the Bay of Fundy, about 30 miles to the northeastward of the entrance to St. John harbour. The bay is semi-circular, and lies open to the southeast between Quaco Head and Macomber Point, some two miles apart, the breadth, from a straight line drawn between these capes, being about a mile. At the mouth of a small river, discharging into the eastern end of the bay, a harbour of refuge has been formed by the construction of two piers, the eastern work, 310 feet long, built in 1873, and the western, 302 feet long, built in 1882-3. The harbour is dry at low water, and is only accessible for about six hours during each tide, to the coasting vessels, which come to load timber or to seek shelter. Spring tides rise 30 feet; neaps, 23.

In 1886-7, small repairs were made by the expenditure of $198.63.

The west pier was damaged by a storm in 1889 and repaired in the following year.

In 1891-2, both piers received general repairs.

In 1893, the west pier was damaged, and was repaired for length of 100 feet.

In 1896-7, repairs were made to the west pier for a distance of 149 feet; the sheathing of the sloping face, and several face-timbers were renewed with birch, 14 inches square, secured with screw bolts, and a quantity of ballast was replaced. A couple of fenders and a ladder were also added. At the same time, the east pier was protected from scour of the stream by brush and stone; 13 new fenders were put on, and the decayed tops of five others were replaced by sound material. Small repairs were also made to the covering and sheathing, and another ladder was provided.

In 1897-8, a sum was applied to closing a small opening and strapping the angle of the west pier, which had been struck by a schooner.

In the fiscal year, 1902-3, the sloping face of the east pier was reconstructed for a length of 70 feet; the outer end being 10 tiers in height, and the inner, 7 tiers high.

In 1903-4, the repairs to the face were completed and were extended for an additional length of 19 feet, the whole being covered with sheathing. Four new mooring-posts were inserted; a new corner fender was placed, and the cap and covering received minor repairs. Some pieces of sheathing were also placed on the west pier.

In 1904-5, repairs were made to the upper works of both the east and west piers, including renewal of the cap, top tiers, stringers and covering.

In 1905-6, the renewal of the covering on the west pier was completed, while the upper works of the east pier were pulled down and rebuilt, which included the top tier of cross-ties, seven rows of stringers and the covering.

In the heavy storm of the 1st of February, 1908, the pier-head and 40 feet of the approach were carried away; to prevent further damage, the exposed end was

sheathed, after being ballasted, and a cap was bolted across the end of the top. Two tiers of face-timbers, 50 feet long and 30 feet long, were laid on the east side of the east pier; and on the west side, six fenders were placed.

The expenditure for 1907-8 was $133.08.

RICHIBUCTO.

Richibucto, Kent county, lies on the eastern side of Northumberland Strait, about 26 miles south of the entrance to Miramichi bay and 40 miles north of Shediac. It is one of the New Brunswick deal ports and the terminus of the Kent Northern Railway.

To improve the entrance to the harbour, it was proposed, many years ago, to construct two breakwaters, one from the north and the other from the south beach, the object being to confine the outlet and produce scour. With this end in view, and to protect the beach itself from erosion, works running east and west were commenced on the north beach, in 1873, and carried on at various times until 1901, when they had reached a total length of 2,158 feet.

During 1903-4, a contract for building a protection to 800 feet of the harbour side of the outer portion and an extension 315 feet long, running in a direction diagonally across the channel, was completed.

On November 16, 1905, a contract for a further extension of 300 feet in the same direction was entered into with Mr. John Jardine. The contract price was $17,000.

The extension consists of brush mattresses, weighted with small stone, through which three rows of piles, five feet apart, are driven, and on which a rubble mound is laid, 12 feet wide on top, finished with large stone and sloping at the rate of two to one on the sides.

Work began on May 1, 1906, and by June 30 of that year, 238 fascines, from 40 to 72 feet long, and one mattress, had been constructed and a second mattress begun.

At the close of the fiscal year 1906-7, the lower mattresses had been placed for the full length of the work, and extra mattresses, on acount of scour of the bottom by the current, to make up the required height; also two of the upper mattresses, were constructed and weighted with small stone. The piles were driven for a length of 171 feet, from the beginning of the work, and the core stone was laid for about the same distance. The placing of slope stone was begun at the inner end.

During the fiscal year 1907-8, the pile-driving was completed and the third of the upper mattresses was laid. Slope stone was laid to 242 feet and core stone to 274 feet from the inner end.

The expenditure for the fiscal year ended March 31, 1908, amounted to $7,840.80.

RIVER ST. JOHN AND TRIBUTARIES.

The River St. John proper, 450 miles long, takes its rise from sources in the province of Quebec and the State of Maine, at a reputed maximum altitude of 2,159 feet above sea level. Entering New Brunswick at the confluence of the St. Francis, a little below the borders of Quebec, it continues to be the international boundary almost to Grand Falls, and after flowing through the province for nearly 300 miles (by way of the counties of Madawaska, Victoria, Carleton, York, Sunbury, King's and Queen's) discharges into the Bay of Fundy at St. John. Many tributaries, some being of considerable magnitude, are received by the main stream. Among them are the St. Francis, Madawaska, Green river, Grand river, Salmon river, Aroostook, Tobique, Presqu'Isle, Meduxnakeag, Nackawick, Eel river, Keswock, Nashwask, Oromocto, Jemseg (Grand lake), Washademoak, Belle Isle and Kennebecasis. Except the last five, which are slightly tidal for some distance, they are fresh water streams.

The total basin, from source to mouth, is computed to be 26,000 square miles, an area almost equal to the whole of New Brunswick, but as a part of the watershed lies outside, only a little more than one-half the province is drained by the river. The St. John is considered navigable for vessels 15 feet in draught for a distance of more than 50 miles from the mouth, but no positive information on this point has yet been obtained. About eight feet at low water can be carried to Fredericton, 84 miles from the sea and six miles below the head of tide at Springhill. Three natural features of the river are remarkable, viz.:—

The tidal falls;
Grand Falls, and
The annual floods.

Although in summer, the fresh water stream between Woodstock and Fredericton is in places 400 to 1,000 feet wide, expanding at the latter place after reaching tide-level to half a mile in breadth, yet the actual mouth of the river (a rocky gorge 400 yards long, immediately at the head of St. John harbour) measures but as many feet across at high water. Here, at low water, the level of the river is from 11 to 15 feet above the sea, and as the ordinary tides flow from 23 to 27 feet, the sea level at high water is from 8 to 13 feet higher than the waters of the river. Thus there are two falls at every tide, viz.: one outward and one inward, and vessels can only pass when the waters of the ocean and the river are on a level. This occurs only for a space of about ten minutes during each ebb and flow of the tide; at all other times it is either impassible or extremely dangerous. (Admiralty Sailing Directions.)

At Grand Falls, 223 miles from the sea, the whole volume of the river plunges over an almost perpendicular face of limestone, 60 feet high, into a deep ravine 250 feet across, somewhat similar to the narrow pass at St. John. Flanked for nearly a mile by lofty rugged cliffs, the confined current dashes from the foot of the falls with excessive strength, mining deep pot-holes in the rocky bottom of the channel in the course of a further descent, estimated to be slightly less than the first.

In the harbour of St. John, ordinary spring tides are considered to rise 25½ feet. At the wharf of the river steamer, a mile above the falls, while summer range is about 3 feet, the highest flood mark is given as 17 feet above extreme low water. At Oromocto, seventy-three miles from the sea (where the tidal range is from 10 to 12 inches), the flood of 1887 reached a bridge 20 feet above low water. At Andover, 200 miles from the sea, floods attain an elevation of more than 27 feet above summer level. By contrast, the Tobique and St. Francis swell 9 and 6 feet respectively. After the first spate, due to the melting of the snow in the catchment basins of the Kennebacasis, Bellisle bay and Washademoak, a secondary flood occurs, caused by the back water of the main river, which is fed from sources farther north, and consequently later in thawing.

The harbour of St. John is open all the year round, but the river is ice-bound from November to April, an average period of 144 days. The water usually begins to rise in April, reaching flood pitch early in May, and maintaining a high level for two or three weeks. By the middle or end of July, the water had fallen to summer level, a stage lasting, with some variation, dependent upon the rainfall, for about sixty or seventy days.

In addition to a little coal, a considerable quantity of cord-wood, and the ordinary food supplies yielded by the farms of a lengthy fertile valley, the trade of the river comprehends an abundance of valuable timber, fluctuating each season in amount, but generally at least equal to 135 million superficial feet annually. Most of the logs are floated loose down the tributaries and upper river to Fredericton, some being manufactured there and shipped coastwise or to the United States. The remainder, or major part, is towed from the provincial capital to St. John, in rafts, giving employment to a fleet of tugs.

For the purpose of works, three divisions may be made of the river:

1. Tidal navigation, for steamers and sailing vessels between St. John and Fredericton, eighty-four miles, requiring 11 feet at low water. Principal obstructions: the Oromocto shoals, about one and a half mile; the middle ground above Oromocto island, about one mile, and the shoals abreast Fredericton, rather more than one-half mile in length. The last are now dredged, but the other obstacles remain.

2. Inland navigation, from Fredericton to Woodstock, a distance of about sixty miles, requiring 3½ feet at low water. The obstacles to inland navigation, besides boulders in some places, and perhaps bed rock at Meductic, are shoals of material more or less coarse, according to the strength of the current, varying in composition from sandy gravel to stone. The chief bars are at Springhill and Bear island; while Knapp's, Perley's, Coas, Nackawick, Belvisor, Moore's, Bett's, Dibblee's and Bedell's bars, with Meductic rapids, constitute, according to present information, lesser obstructions. Dividing above Springhill, into two main channels, and from a general width of 350 yards, opening to a stretch of one and one-half miles between banks, with a waterway, increased by at least one-third, the river becomes dotted with eyots and shallows. Two gravel shoals, known as the Russel and Chapel bars, together about one-half mile in length, compose the obstacles at Springhill. At Bear island, twenty-five miles above Fredericton, in consequence of another division of the river into three channels, aggregating 600 yards in breadth, a shoal of gravel and stones, one mile long, giving 21 inches at low water, has been formed. Besides dredging, a long training dyke will be necessary for the maintenance of the channel. After reuniting below the island, the width of waterway, in the single channel, is only 250 yards.

3. The upper river, including, with the tributaries, all that part above Woodstock. This division is now used for the passage of timber only. On some of the tributaries beyond the reach of railways, supplies for the lumber camps are transported in tow-boats, for which channels are required to be made and tow-paths provided.

River St. John, Tidal Navigation.—The tidal compartment of the River St. John comprehends, besides the main stream, navigable by steamers which run daily between St. John and Fredericton, a distance of 84 miles, four tidal arms, all navigable by wood boats and regular passenger steamers, the extent of the whole tidal navigation being as follows :

Main river, St. John	84	miles long.
Kennebecasis	24	"
Belleisle bay	12	"
Washademoak lake	27	"
Grand lake and Salmon river	35	"
Total extent	182	miles.

For the convenience of steamers and other craft navigating the main river and its branches, the provincial government has erected a number of wharfs, towards which the department has made contributions amounting to one-half the certified cost.

During the year 1901-2, assistance was given to a number of these wharfs, $3,000 being available for that purpose; while in the fiscal year 1902-3, $4,813.14 was applied to the same object.

In 1905-6, contributions aggregating $3,293.82 were made by the department to six of these wharfs.

In 1906-7, these contributions amounted to $1,333.32.

In 1907-8, contributions, aggregating $2,060.64 were made by the department to four of these wharfs, namely, Carter's, Jamseg and Ketchum.

On a river, such as the St. John, where large lumbering operations are conducted, and the logs are floated to the head of the tidal navigation, it may be supposed that some of them escape from the booms. This is especially the case, when there is a rotten knot or end, which soon becomes saturated with water; such logs continue to float down the river, with one end much deeper than the other, and they together with

trees, drawn from the banks, constitute the snags, which are frequently struck by the steamers and inflict serious damage.

In 1907-8, five hundred snags were picked up by a small tug, were brought to the river bank and hauled up above flood level. Some of these were trees with branches, which it is impossible to drag out. These were shattered with dynamite and hauled up, like the others, to prevent their taking to the water on the rise of the river.

The expenditure during 1907-8 was $2,411.05.

Inland Navigation.—In 1907-8 no improvements were made on the inland navigation.

River St. John, Upper.—The upper river, comprehending many branches, including the Tobique, Green river, St. Francis, &c., extends from Woodstock to the north-western boundary of the province. Navigation on the upper river is confined to the passage of timber and rafts ,or to the tow-boats which convey supplies up the streams, from the end of the railways to the lumber camps, situated beyond the lines or ordinary communication.

RIVER ST. JOHN (UPPER).

Grand Falls to Salmon River.—Between Grand Falls and Salmon river, about seven cubic yards of rock were blasted; rocks were besides removed from the channel, and the tow-path was improved.

The expenditure during the year amounted to $100.

SALMON RIVER.

A breastwork, 150 feet long and five feet wide, four feet high, was built and ballasted with stone at this place.

The expenditure for the year amounted to $249.98.

JOHNSON'S.

A dam, 190 feet long, 12 feet wide and 7 feet high, was built of elm timber at this place, and partially ballasted.

The expenditure for the year amounted to $391.54.

GRAND FALLS (NARROWS).

Sixty-nine cubic yards of rock were blasted from the narrows at Grand Falls.

The expenditure for the year amounted to $150.

LITTLE RIVER DAM.

A dam, 50 feet long, 6 feet wide and 5 feet high, was built on Little river.

The expenditure for the year amounted to $91.01.

Another dam, used for storing water for river driving, was repaired by placing brush, stone and gravel in layers, 72 feet long, 40 feet wide and 5½ feet high.

The expenditure for the year amounted to $566.49.

TOBIQUE RIVER.

The channel of the main Tobique was deepened for a distance of half a mile. About 200 rocks were removed and general improvements were made to the bars, for a distance of three miles.

The expenditure for the year amounted to $169.

DIAMOND ISLAND.

A sheer dam, 225 feet long, 17 feet in mean width and 9 feet high, was built of elm timber and ballasted.

The expenditure for the year amounted to $393.51.

RIGHT HAND BRANCH, TOBIQUE RIVER.

Beginning at a point 25 miles above the mouth of the Right Hand branch, a channel, 25 feet wide, was cleared and deepened between Square lake and the mouth of Britt brook, a distance of three miles.

The expenditure for the year amounted to $500.50.

WAPSKEHEGAN.

On the Wapskehegan, a branch of the Tobique, 12 boulders, measuring about 10 cubic yards, were blasted and obstructions were removed from the stream, for a distance of about three miles. Cribwork, 55 feet long, 14 feet wide and 9 feet high was also built on this river.

The expenditure during the year amounted to $154.36.

BOSSÉ ISLAND (TOBIQUE RIVER).

At this place, a cribwork wharf, 100 feet long, 12 feet wide, and 3 feet high, was built.

The expenditure during the year amounted to $91.20.

KENNEDY'S FLATS (TOBIQUE RIVER).

A breakwater, 128 feet long, 10 feet wide and 6 feet high, was built.

The expenditure during the year amounted to $250.

QUISIBIS (TOBIQUE RIVER).

On the Quisbis, a dam 150 feet long, 15 feet wide and 6 feet high, was built. Rocks were removed and the channel was cleared to a width of 30 feet, for a distance of three miles, at a point 25 miles above the mouth of the river.

The expenditure during the year amounted to $500.

LITTLE FORKS (GREEN RIVER).

Rocks and other obstructions were removed from the channel and the bushes were cut down for a distance of five miles.

The expenditure during the year amounted to $199.25.

EDMUNDSTON.

A breastwork, built at Edmundston some years ago, for protection of the place from running ice, was partially burnt by fire which occurred in the town. About one-third of the work of rebuilding was completed by the end of the fiscal year.

The expenditure during 1907-8 was $268.12.

TROUT RIVER.

About 30 cubic yards of rock were blasted; rocks and obstructions were removed and general improvements made for a distance of about six miles on Trout river.

The expenditure during the year amounted to $152.28.

LITTLE RIVER ST. FRANCIS.

About seven miles above the mouth of Little river, a dam, 33 feet long and 11 feet high, was built and ballasted. Six boulders were blasted and rocks were removed from the channel.

The expenditure during the year amounted to $123.37.

GREW BAR (ST. FRANCIS).

At the mouth of the St. Francis, boulders were blasted and rocks were removed from Grew Bar.

The expenditure during the year amounted to $100.11.

ST. GEORGE.

St. George, formerly called Magaguadavic, a small but flourishing town containing with the parish about 3,000 inhabitants, and situated at the head of tide on the river of that name, is chiefly noted for lumbering and for the monumental works established there to manufacture the red granite of the neighbourhood. On account of the fine water power, due to the great fall immediately at the village, from fresh to tidal water, a pulp mill has been erected.

A public wharf, built by the county in tidal water, was partially repaired during the year 1901-2, by the department. This old wharf of round cribwork, 127 feet long, and 39 feet wide, stands at the head in 24 feet at high water ordinary spring tides. The repairs consisted in re-building and raising the principal part of the wing of the wharf, 43 feet long and 20 feet wide, and in repairing the approach, 26½ feet long and 38 feet wide.

During the fiscal year 1902-3, the approach to this wharf, 36 feet in width, which had been scoured by heavy rainfall, was repaired for a length of 25 feet, being filled in solidly to a depth of six feet. Two guard-timbers were also placed on the lower side of the wharf.

In 1907-8, the wharf having become decayed, the east side, for a width of 18 feet, a general height of 10 feet and a length of 128 feet, was taken down and rebuilt. The approach, 26 feet long, was raised and new cap timbers were placed upon it. These repairs, with the exception of the fendering, were completed.

The expenditure during 1907-8 was $1,145.07.

ST. MARY'S.

St. Mary's, Kent county, is a well settled farming district on the Buctouche river, seven miles above Buctouche.

The wharf, 125 feet long and 18 to 37 feet wide, was built in 1884 and repaired in the spring of 1892. It lies about 190 feet from the shore and is approached from the highway bridge. The latter was lately rebuilt, but with an elevation 7.0 feet higher than before, thus preventing access to the wharf. Work was therefore begun in August, 1907, on a new approach, consisting of a ramp about 37 feet long, built on the wharf; a level portion about 19 feet long, built partly on the wharf and partly as a span, forming a turn in the roadway; two blocks about 18 feet wide and 14½ feet long, and a span of 15 feet placed parallel to the bridge; the last block is level for the turn-in to the bridge, and the span and first block are sloping at the rate of 1 in 12. The upper timbers of the approach were painted with carbolineum as well as the cap on the wharf. This was completed on October 4.

The expenditure for the fiscal year 1907-8 was $673.45.

ST. NICHOLAS RIVER.

St. Nicholas river, or 'Robertson's Wharf,' Kent county, lies about a mile above the mouth of the St. Nicholas river, which empties into the Richibucto river, about four

miles above Rexton. This wharf, built in 1900 and 1901, at a cost of $2,306.52, is used for the shipment of lumber, hemlock bark, farm produce, &c. It is 159 feet long and consisted of a pier-head, 24 by 34 feet, an 80-foot section, 20 feet wide, and a 55-foot section, 15 feet wide.

As the wharf was found too small, it was enlarged during the fiscal year 1907-8, by an addition of a strip, 14 feet wide and 133·7 feet long, on one side of the approach, composed of three blocks, 22·9, 22·2 and 22·3 feet long, and four spans, 9·1, 16·5, 20·4 and 20·3 feet long. A block 14 feet by 24 feet was also built at one end of the pier-head, enlarging the latter to 48·6 by 24 feet.

The expenditure for the fiscal year ending March 31, 1908, was $1,531.09.

SHIPPIGAN GULLY.

Shippigan Gully, Gloucester county, a passage between Shippigan island and the mainland, much used by fishing and other vessels in passing from Baie des Chaleurs to the Gulf of St. Lawrence, is situated fifty-six miles east of Bathurst, the shire town of the county, and three miles from Shippigan, the terminus of the Caraquet Railway.

Works were commenced in 1875 for the purpose of improving the channel at the Gully; first, (1875-9), by constructing a breakwater on the east side, and a dam to close what was known as the East Gully; repairs and extensions of the dam and breakwater were in progress during 1880-4, 1886-7, 1888-92 and 1893-4. Secondly, in 1890-92, by building a breakwater off the west beach; this was repaired in 1892-94. Thirdly, between 1897 and 1905, by constructing beach protection works on both sides of the harbour, closing all runnels which might enlarge or cause dangerous gaps in the beach, and building groynes to promote accumulation of sand and gravel for the protection of the work. During that period, general repairs were also carried on and a new pile pier-head, 44 by 34 feet, was built as an extension to the eastern breakwater.

At the commencement of the works, the depth at the entrance was only 3¼ feet at low water; in 1898 it had increased to nearly 6½ feet, and by a survey made in 1903-4, it was shown that the concentration of the current in one channel, by the construction of the breakwaters and other works, had increased the depth to about 8 feet at low water, or 13.8 feet at high water of spring tides.

About 190 feet of the outer end of the western breakwater was rebuilt on the inner face and close-piled on the outside during 1904 to 1907 and filled with brush and stone to within 3 feet of the covering. During the same period, a pile block, 77 feet long on the centre line and 24 feet 4 inches in extreme width, was built on the inside of the west breakwater, 86 feet from the outer end. This will protect the breakwater from the ice of Shippigan harbour which strikes here with great force, when carried by the ebb tide and strong winds; it will also tend to deflect the current and straighten the channel, which now makes a sharp double bend just inside the entrance.

The block was extended a further distance of 75 feet during the fiscal year ending March 31, 1908, and 35 cubic yards of ballast were placed in the first section, where the filling had settled.

During the fiscal year, 2,000 feet B.M. of new flooring was laid on the west breakwater, and 6 piles on the inside face, broken by ice, were renewed.

A house, 20 feet by 12½ feet, for lodging the men and storing tools, was built near the inner end of the west breakwater.

On the east side, a gap in the breastworks, about 50 feet long and 6 feet deep, was filled with brush and stone, and two groynes were cut down to prevent their being lifted and destroyed by ice.

The expenditure for the fiscal year ending March 31, 1908, amounted to $5,691.54.

SHIPPIGAN HARBOUR.

Shippigan is a village and settlement of about 1,000 inhabitants, situated on the mainland, just opposite Shippigan island. It is distant by rail sixty-five miles from Bathurst and three from Shippigan Gully.

Between the village and Shippigan island is a fine harbour about seven miles long, north and south, and from two-thirds of a mile to five miles wide, opening into the Baie des Chaleurs on the north, through Shippigan channel, about two miles wide, and into the Gulf of St. Lawrence, on the south, through Shippigan Gully, 720 feet wide between breakwaters.

On December 29, 1905, the department entered into a contract with Mr. T. P. Charleston for the construction of a wharf, at the terminus of the Caraquet Railway, which is central as regards population, near deep water, and a convenient point for passage to Shippigan and Miscou islands.

The wharf is 900 feet long, and consists of a shore block, 245 by 25 feet; 13 blocks, 25 feet square; 14 spans of 20 feet, and a pier-head, 50 by 30 feet. The contract price was $15,940.

The work was begun on May 4, and completed on November 30, 1906.

On December 10, 1906, an agreement was made with Mr. Charleson for the construction of a 25-foot extension to the pier-head, close-piling the whole outer face and end corners; sheathing part of the end face, and placing iron straps around the end corners of the pier-head. The price of the extra work was $2,000. It was begun on December 18, and by March 31, 1907, the crib for the extension was built to a height of 16 feet, 9 inches. The work was completed on May 14, 1907.

During 1907-8, a roadway approach to the wharf and a shed, 20 by 10 feet, on the pier-head for storing freight, were built by day labour.

The new approach lies at an angle of 66° with the side of the wharf and 12 feet from the inner end. It is 75 feet long, of which 27 feet is cribwork covered with plank and the remainder a cribwork retaining wall with earth filling.

The expenditure for day labour, for the fiscal year 1907-8, was $785.69. There was also an expenditure; in connection with the contract, of $87.50 for inspection.

STONEHAVEN.

Stonehaven, formerly Clifton, Gloucester county, is situated on the south side of Baie des Chaleurs, 18 miles east of Bathurst. The breakwater at this place, originally 425 feet long and built by private persons, was acquired by the department in 1878. During the same year it was extended 325 feet. The outer 220 feet is placed at an angle of 72° with the shore portion.

During the year 1901-2, a cribwork block, 70 by 40 feet, at the western end of the work, was completed. This was intended to stop the stone (placed along the northern face for its protection) from being carried westward during easterly storms.

In 1905-6, a new pier was begun, to protect the harbour from westerly storms. It starts at the shore, 225 feet westerly of the present work, and runs out toward the end block of the old breakwater. An entrance 120 feet wide is left between the two works.

The new pier consists of an approach 254 feet long and 15 feet wide on top, of round timber cribwork, sheathed on the inside with three-inch hardwood plank, and a pier-head, with faces of square timber, 50 by 30 feet. The timber work was completed during 1905-6, and a stone slope, faced with close laid granite blocks, which is to protect the outer side of the approach, was constructed for a length of 90 feet.

During the fiscal year 1906-7, the stone slope of the new pier was completed and about 195 cubic yards of small and 75 of large stone were placed outside the pier-head, and 16 fenders around the end block of the old block.

During the fiscal year 1907-8, a gap, 30 feet long, in the slope outside the new pier, was repaired. The derrick was repaired and moved to the pier-head of the old

breakwater where a smooth stone slope, about 80 feet long, was laid over the old talus easterly from the end block, and a footing course for the next 70 feet. Stone was also deposited around the northeast corner of the breakwater to extend this work; 418 cubic yards of granite ballast and boulders, containing under one-half cubic yard each, and 3194 cubic yards of granite boulders containing over one-half cubic yard each, were procured.

The expenditure for the fiscal year ending March 31, 1908, was $2,030.

TRACADIE.

Tracadie, Gloucester county, is situated on the Gulf of St. Lawrence, about midway between Shippigan Gully and the entrance to Miramichi bay.

To provide shipping facilities for the district, which has a population of over 2,000, the department in 1894, constructed a wharf of blocks and spans, 1,430 feet long and 25 feet wide.

In 1900-1, a cribwork block, 55 by 27 feet, lying immediately outside the departmental work, was repaired and connected with it; repairs on the main structure were also made during 1900-1, 1901-2 and 1903-4.

During the fiscal year 1907-8, the flooring of the wharf was repaired in a number of places, requiring about 1,750 F.B.M. of three-inch deals. The cost of the work, including timber and iron, was $25.

TYNEMOUTH CREEK.

Tynemouth creek, St. John county, 21 miles east of the city of St. John, is one of the several small havens, dry at low water, found on both shores of the Bay of Fundy, which are only useful on account of the high range of tide. Tides rise here about 28 feet. Inside a beach of gravel and stones is a tidal basin, accessible to small vessels at high water by an opening at the east end of the beach.

In 1874-5, the department built a substantial cribwork pier on the rocky foreshore of the eastern cliff, to prevent vessels from taking ground on that side.

In 1882-3, another work to maintain the channel was built on the point of the beach on the opposite side.

In 1894-5, a sum of $225 was applied in replacing some of the fenders and covering of the east pier and in removing part of the rocky ledge obstructing the channel.

In 1897-8, a sum of $510 was expended in removing 813 cubic yards of shingle from a shoal obstructing the entrance and in effecting minor repairs to the west pier.

The harbour is constituted by a long beach, stretching from the western side of the inlet. By heavy gales, the crest of the beach was cut down almost five feet for a length of 300 feet.

In 1900-1, to prevent this beach from being lowered and the harbour from being endangered, a protection work of piles and planks, from which three groynes, 41 feet long, projected, was built for a length of 345 feet.

At the cribwork groyne of the west pier, a block 68 feet long over all, and 16 feet wide, repairs were made for a length of 52 feet; new ballast floors were inserted; new ballast was placed in the work, and the top was given new stringers, and in great part, new covering, besides 10 new fenders. The remainder of the covering of the west pier was also patched in places.

At the east pier, chocks were inserted between started face-timbers, to retain the ballast; 13 new fenders were placed and the break was repaired.

During the fiscal year 1903-4, the main body of the west pier was raised two feet for a length of 116 feet; was ballasted for a depth of five feet, and was newly covered. The spur of the west pier was also raised two tiers, ballasted and covered; while the inner end was levelled up and raised one tier. Three new fenders were

added to the east pier, and loose fenders were bolted. The road approaching this pier was also repaired for a distance of about 50 yards. The shoal obstructing the entrance to this harbour was removed, the channel being made 45 feet wider, and two feet deeper than before, by removing the bar for a maximum length of about 300 feet.

In 1904-5, general repairs were made, principally to the west pier, part of which was raised five feet, ballasted, covered and fendered. At low water, the channel which curved sharply, was straightened, and the shingle banks were protected with brush and stone. Large stones were also removed from the beach and the channel was much improved.

In 1907-8, a part of the channel, 215 feet long and 40 feet wide, was cleared of boulders and rocks. A ledge, 75 feet long and 25 feet wide, with a height of from one to four feet, was removed by blasting. One boulder, of 15 cubic yards, and 17 boulders of one cubic yard, were also blasted. Three new fenders were placed on the east pier, and the covering, with the approach, was repaired.

The expenditure during 1907-8 was $300.

WILSON'S BEACH—CAMPOBELLO.

At Wilson's Beach, a fishing settlement in a slight indentation of the coast on the west side of Campobello, an island in the Bay of Fundy, forming a part of the county of Charlotte, a breakwater, 373 feet in length, was built to shelter the cove by the joint contributions of the federal and local governments, between the years 1874 and 1878. The outer arm of the breakwater having become delapidated and the cove having been silted up, prepartions were made, 1899-1900, to restore the inner end, 284 feet in length and the repairs were nearly completed in the year 1900-1. A quantity of materials was also procured for the construction, in deep water, of the dismantled outer end.

In 1901-2, the repairs to the inner end were completed. Crib No. 1 of the part to be reconstructed, 80 feet in mean length and 36 feet wide, consisting principally of hardwood timber, was built, placed in position and ballasted. Crib No. 2, 74 by 40, made of similar materials, was also begun, and at the end of June, had been built to a height of eight tiers. A quantity of timber was also delivered.

In the fiscal year 1902-3, crib No. 1 was increased 130 feet in length on the outside and raised at the inner end to the 26th, and at the outer to the 23rd tier. Crib No. 2 was brought up to the 23rd tier.

In 1903-4, the superstructure of crib No. 1 was completed; the top of crib No. 2 was brought up to the full height, with the exception of the benching required to be left for making connection with crib No. 3, which was begun and brought up to the 10th tier in height.

By the end of 1904-5, crib No. 3 had been built, sunk in place, brought up to the height of the third floor and ballasted, and the work had been covered to within 85 feet of the end.

During 1906-7, the tops of the fenders of crib No. 1, ranging from 12 to 20 feet in length, were placed; crib No. 3 was built up eleven tiers in height, without including the cap, was ballasted and covered; the fenders were completed on No. 2 crib. Three mooring posts were placed in crib No. 3 and a movable slip, with hoisting gear, was built. The upper works were painted with carbolineum. With the exception of some planking, the work was completed.

In 1907-8, the fenders inside the work, which were single, were doubled, by placing plank on edge on the other side of projecting dovetails, for the purpose of preventing boats from catching upon them when lying alongside; a ladder was built; the movable slip was put in order and completed, and the top of the work, for five tiers, was painted with carbolineum.

The expenditure during 1907-8 was $147.97.

PROVINCE OF QUEBEC.

AGNES (LAKE MEGANTIC).

Agnes, a post village in Beauce county, is situated on the River Chaudiere, south-east of Lake Megantic and on the C.P.R.

On October 23, 1907, a contract was entered into between the Crown and M. M. A. A. Lapointe & Bros., of Agnes, for the construction of a landing pier, near the site and upstream of the old bridge connecting Agnes with the village of Megantic. It called for:—

1. An outer concrete pier, 25 feet 8 inches long and 4 feet wide at top, by 26 feet feet 8 inches long and 5 feet wide at bottom, standing 9 feet 3½ inches high from low water level on a close-faced crib substructure, 28 feet long and 10 feet wide, sunk in an average of 4½ feet of water.

2. A 40-foot steel span composed of two 24-inch 80 lbs. I beams connected by two 20-inch 65 lbs. I beams with six by eight-inch tamarac and pine stringers, and three-inch pine flooring, 27 feet 2½ inches wide; double 1⅝-inch iron pipe railing with iron posts overy eight feet on downstream side and 12 by 12-inch cap pieces on other side.

3. A concrete abutment terminating stone approach, 76 feet long and 27 feet 2½ inches wide, at top, with sides riprapped and sloped 1 in 1½, sidewalk and hand-railing on both sides.

Total length of wharf at top, 122 feet with flooring, 10 feet 11 inches above extreme low water level. Contract price, $4,600.

Work was begun in November last; at the end of March, 1908, the crib substructure of outer pier had been sunk in place and fully ballasted and the stone approach about one-third done. The total expenditure up to March 31, 1908, was $1,079.42.

ANSE À BEAUFILS.

Anse à Beaufils, in the municipality of Cape Cove, county of Gaspé, is situated on the Gulf of St. Lawrence, six miles south of Percé.

In the years 1898 to 1901, protection works, on each side of the channel leading to the inner basin, were built, consisting of two training piers, each about 440 feet long.

During the last fiscal year, the sheathing of the right inside jetty had been secured with spikes, and when needed, replaced at a cost of $39.94.

ANSE À BENJAMIN.

Anse à Benjamin, at St. Alphonse, is situated on the west side of Ha Ha bay, in the county of Chicoutimi.

The work, commenced in the fiscal year 1904-5, was continued; it consisted in the blasting and removal of rock and boulders.

The expenditure during the fiscal year 1907-8 was $1,014.06.

ANSE À LA BARBE.

Anse à la Barbe, Bonaventure county, six miles below Port Daniel, is a settlement of 300 or 400 people, mostly engaged in the fishing industry.

During the fiscal year 1907-8, a contract was let for the sum of $11,300, for the construction of a breakwater, the work to be 300 feet long, 24 feet wide and 30 feet high at the outer end. The work is intended to give shelter to fishing boats in the neighbourhood.

Expenditure during last fiscal year, $2,708.21.

ANSE À LA GROSSE ROCHE.

Anse à la Grosse Roche, in the parish of Sacré Cœur, in Chicoutimi county, is situated on the north side of the River Saguenay, twelve miles from its mouth.

During the year 1903-4, a certain quantity of timber was bought, in view of the construction of a wharf at this place.

Amount expended, $599.50.

During the fiscal year 1904-5, a contract was awarded for the construction of the wharf, for the sum of $9,000; work was commenced at once, and continued the following years.

When completed, the wharf will be 265 feet long and carry a depth of water, at the outer end, of 16 feet, low water spring tides. It will consist of three piers, placed 20 feet apart; the outer pier, built in the form of an 'L,' will be 105 feet long and 40 feet wide.

During the fiscal year 1907-8, the sheathing and five pieces of face timbers on the southwest corner, having been damaged by ice, were repaired at a cost of $415.11.

Spring tides rise 17 feet; neaps, 10 feet.

ANSE À L'ISLOT.

Anse à l'Islot is a small harbour, seven miles east of Newport, protected from the northerly and easterly winds by the main coast and from southwest gales by a small island, being thus open only to southerly gales. It was decided to build a landing pier running from the main shore towards the outside end of the island in a southwesterly direction, answering both as a landing pier and as a breakwater, against southerly gales.

During the fiscal year 1906-7, two cribs, 90 feet long each, were built. The first had but shortly been in position when a very severe southerly storm turned it out of position and brought the second ashore, where it was demolished. The first had to be altogether unballasted and brought ashore.

During the months of February and March, a crib, 90 feet long, was built and placed in position in 6 feet of water at low tide and built to coping.

During the last fiscal year, the cribwork commenced, and the approach, forming a total length of pier of 260 feet, have been completed.

The wharf is 22 feet wide at top and 25 feet at bottom, with 11 feet of water at L.W.S. at outside end.

Expenditure, $2,518.18.

ANSE AU GRIFFON.

Anse au Griffon is 17 miles northwest of Gaspé Cape.

The mouth of the river having been choked and closed up by a gravel bar thrown in by northeasterly gales, overflowed the flats and parts of the village, causing a good deal of damage to properties and to the fishing industry.

The new channel running easterly inside of the gravel bar had to be closed by a training pier, 345 feet long and 22 wide, by an average height of 11 feet, with brush and stone packing.

The gravel bar, being 10 to 12 feet high and 170 feet wide, had to be cut through for the continuation of the training pier and the opening of a new channel and a channel of 600 feet, removing 440 cubic yards of earth, had to be made at some distance above the work, so as to take the water from a small tributary into the main river above the works under construction.

Three hundred and ninety feet of the west or left hand side training pier has been built and secured.

During the last fiscal year, timber was bought for an amount of $410.78 and 50 feet of breastwork was built on the southwest shore end of the left jetty.

Total expenditure, $752.26.

ANSE-AUX-GASCONS.

The village of Anse-aux-Gascons is situated on the north shore of the Baie des Chaleurs, in the township of Port Daniel, county of Bonaventure. It is one of the best fishing stations of the Baie des Chaleurs.

Like many other constructions along the coast, the extension to the wharf at that place, which is 210 feet in length, by 30 feet in width, had been broken and displaced by the sea during the big storm of November, 1906.

During the fiscal year 1907-8, the construction upon its full length and width had been undone to low water mark and reconstructed in close-faced cribwork to its normal height, or 15 feet above low water spring tides; the south side was sheathed with hardwood sheathing and the north side protected with fenders.

The old part of the wharf, 436 feet long by 20 feet wide, which had settled in many places, has been straightened out and levelled.

A small crib has also been built to protect the freight shed, which was enlarged.

The work has been carried out by day labour at a cost of $3,999.82.

ASHUAPMOUCHOUAN AND PERIBONKA RIVERS.

Ashuapmouchuan river, in the county of Chicoutimi, is one of the tributaries of Lake St. John, and is navigable up to St. Felicien; a boat runs from Roberval to St. Felicien.

In view of increasing depth of the channel, at extreme low water, three dykes were commenced, in 1905-6, at St. Prime, at St. Felicien, and at Péribonka.

At St. Prime, the work done, during the year 1907-8, consisted of the construction of a new dam of which there is 400 feet in length completed, 12 feet wide, and of an average height of 14 feet.

Amount expended, $829.07.

At St. Felicien, the work done, during the fiscal year 1907-8, consisted in putting in stones and brush; 1,600 feet were completed, giving an average height of 10 feet.

Amount expended, $2,411.16.

Péribonka river, in the county of Chicoutimi, is also a tributary of Lake St. John; the river is navigable up to Honfleur for 12 miles; boats run from Roberval to Honfleur.

The work done, during the fiscal year 1907-8, was the continuation of the dam, which is now 1,600 feet long.

Amount expended, $1,652.62.

BABIN'S ROAD.

Babin's Road, a meeting place for fishermen, is situated about three miles west of New Carlisle, county of Bonaventure.

In view of the construction of a small breakwater at that place to shelter fishing boats, the sum of $300 has been expended during the last fiscal year in procuring timber for the proposed work.

BAIE DES BACONS.

Baie des Bacons is situated on the north shore of the River St. Lawrence, in the parish of Mille-Vaches, about five miles west of Mille-Vaches.

Baie des Bacons is a long batture, with a channel made by the river, and there is a wharf on shore, which is used to load timber, cordwood, &c.

The removal of boulders, close to the channel, was the work done during the last fiscal year.

Expenditure, $201.34.

BAIE ST. PAUL.

Baie St. Paul, a village in the county of Charlevoix, has a population of 1,500. It is situated on the north shore of the River St. Lawrence, 60 miles below Quebec. It is built on either sides of the 'Rivière du Gouffre,' which is a tributary of the River St. Lawrence and empties into a large bay three miles wide, which is dry at low tide.

During the present fiscal year, the crib that was built last year on the northeast side of the wharf, at Cap-aux-Corbeaux, was completed. A complete new movable slip was also built 80 feet farther in shore than the old one. This slip was provided with all the necessary appliances.

Minor repairs were also made to the flooring and shed.

The expenditure for the fiscal year 1907-8 amounts to $1,343.02.

BARACHOIS DE MALBAIE.

Barachois de Malbaie is a large parish and municipality situated at the head of Malbaie bay, some 12 miles east of the shiretown of Percé.

Until the government started the training pier now under construction, the fishing boats could not safely enter or go out of the harbour at falling tide or at low tide, on account of shifting sand bars.

During the fiscal year 1904-5, a crib, 100 by 23 by 18 feet, was partly built and placed in position at 590 feet from extreme high water mark and the approach thereto, from said high water mark, built of fascine mattresses with brush and stone-filling, was commenced.

During the fiscal year 1905-6, the 100-foot crib was completed; the roadway filled, with the exception of an average of five feet, and a new crib, 120 feet long, built and secured in position.

During the last fiscal year, a new crib of 100 feet was built and placed in position, and the balance of the work was built up to coping and partly ballasted. A small groyne of 25 feet, placed on the outside, was brought ashore by a heavy storm before it was fully ballasted and will have to be replaced in position ; $4,000 worth of materials for construction, timber, ballast stone and iron were bought from January to April.

Expenditure, $8,698.88.

BEAUPRÉ.

Beaupré is a village situated on the north side of the River St. Lawrence, 24 miles below Quebec. The lumber trade at this place is very important and increasing every year.

During the present fiscal year, the construction of the new wharf that was started last year, was completed. This construction consists of a close-faced timber crib filled with ballast stones. This wharf has the following dimensions: length, 250 feet; width, 12 feet, and average height of 16 feet.

The expenditure for the year 1907-8 amounts to $3,402.84.

BERTHIER.

The village of Berthier, in the county of Montmagny, is on the south shore of the St. Lawrence, 29 miles below Quebec.

A large traffic in agricultural products is done through the coasting steamer *Champion,* which plies daily between Quebec and Berthier.

Spring tides rise 21 feet; neaps, 13 feet.

During the fiscal year 1907-8, 30,500 feet B.M. of spruce deals, 3 inches thick, were used to renew the planking of the wharf; four new mooring posts were replaced, and general repairs have been made to the old planking.

Some repairs have also been made on the freight shed; to the slip on the east side of the wharf, and to the spruce sheathing.

The expenditure for the fiscal year was $998.12.

BIC.

Bic, on the south shore of the St. Lawrence, in the county of Rimouski, about 170 miles below Quebec, is a favourite summer resort. Its harbour affords the best natural shelter for vessels of moderate draught.

Spring tides rise 16 feet; neaps, 8½ feet.

In order to provide more facilities in landing and to accommodate the traffic with the north shore, which is becoming more extensive every year, it was decided to build a wharf at Pointe a Coté, where vessels could land at all stages of the tide. The work will consist of an approach, 556 feet, and an outside section, 345 feet long, giving a depth of water of 10 feet at low water spring tides. The work was commenced by day labour in May, 1906, and the approach, including the part on the island, is now nearly completed. About 80 feet long remains to be built.

During the fiscal year, a length of 356 feet of cribwork, 22 feet wide by a mean depth of 5 feet, filled with stone, was constructed; much blasting was done, as the shore of the island consists mostly of rocky cliffs. A considerable quantity of timber and iron, available for further work, was left on the site of the work. Materials, consisting of cedar, were bought to build the fence leading from the village to Pointe a Coté, at a cost of $296.15. Lastly, some repairs were made on the old wharf, as superstructure is in an advanced state of decay, and the sum of $467.39 was spent.

The total expenditure for the year 1907-8 is $7,115.90.

BLACK CAPE.

Black Cape, in the township of New Richmond, county of Bonaventure, is situated on the north short of the Baie des Chaleurs, between New Richmond and St. Charles de Caplan.

In order to provide accommodation to fishermen and to give shelter to boats, the sum of $500.38 has been expended in the construction of a protection crib, 50 feet long by 10 feet in width, and 8 feet high, and of a breakwater, 56 feet long, 17 feet wide and 9 feet high.

The work was done by day labour.

CACOUNA.

Cacouna, one of the best known and most frequented summer resorts in Canada, is situated on the south shore of the St. Lawrence, in the county of Témiscouata, 120 miles below Quebec.

Spring tides rise 19 feet; neaps, 9 feet.

Repairs done to the wharf during the fiscal year 1907-8: the flooring, upon a surface of 18,400 square feet, was renewed with spruce deals three inches thick; the south face-timbers, near the shore end, which were decayed, have been repaired.

A few bad rocks and boulders, in the vicinity of the wharf, were blasted and removed.

The expenditure amounted to $1,515.01.

CAP À L'AIGLE.

Cap à l'Aigle is situated some six miles below Murray Bay, in the county of Charlevoix. This place is one of the most frequented summer resorts.

During the first six months of the present fiscal year, the movable slip was repaired at a cost of $60.75.

CAP DE LA MADELEINE.

Cap de la Madeleine is a village, on the north side of the St. Lawrence, two miles below Three Rivers.

The government wharf, built in 1887, having been damaged by ice, repairs were commenced July 1, and completed September 2, 1907.

Some 39 cubic yards of crib-work have been renewed, as also the paving of the eastern section.

Dredge *St. Pierre* worked to remove the shoal in front of the wharf, between July 1 and 5, 1907.

Some 5,130 cubic yards of stone and sand were removed; two cuts were made, 190 and 150 feet long, 30 feet wide and to a depth of eight feet at low water.

Total expenditure, including repairs, dredging, &c., $1,103.78.

CAPLAN.

St. Charles de Caplan, situated on the north shore of the Baie des Chaleurs, is one of the most important centres of Bonaventure county.

During the fiscal year 1907-8, the sum of $500 has been expended to build a small breakwater of 65 feet long, 12 feet wide and 10 feet high, and protection crib of 80 feet in length, 10 feet in width and 8 feet in height.

These constructions are of round timber crib-work of the usual type.

The sum of $50 was also expended towards urgent repairs to the protection work at the mouth of the river.

The work has been carried on by day labour.

CHAMPLAIN.

Champlain, a post village in Champlain county, is situated on the River St. Lawrence and on the Canadian Pacific Railway, 15 miles from Three Rivers.

The population of the village is 737; of the parish, 840.

In view of affording much-needed water facilities to the traffic of Champlain and surrounding localities, it was decided, in 1904, to build a public wharf at that place.

In May of that year, an old wharf, together with a piece of land of about one-half an acre in area, on the shore of the river and right of way from the public road to the wharf, was purchased for the sum of $1,000. On June 30, materials, consisting of timber, lumber, crushed stone, iron, cement, &c., had been procured for the sum of $4,628.07.

During the fiscal year 1904-5, the wooden crib substructure, for a length of 110 feet and a width of 30 feet, was built to a height of two feet above extreme low water level, sunk in front of the old wharf and fully ballasted with stone. This was completed in September.

The superstructure, being of the same dimensions as the crib at bottom, but 98½ feet by 30 feet at top and 9 feet high, is of reinforced concrete, mixed 1 to 4 and composed of 12 by 12-inch members, with 2½-inch and 2⅞-inch iron bars inserted three inches from outside and inside faces respectively. These members are held together by iron bars, 10½ feet long and laid vertically. A slip, nine feet wide, 11 feet long and starting five feet above low water, was made in the middle of the face. The ice-breaker, resting on stone foundation and inclined 1⅓ in 1, is mass concrete mixed 1:3:5. The filling of whole head-block, up to one foot below cap pieces, is stone and sand. Tamarac fenders all aong the face complete the structure.

During the autumn and spring 1904-5, 165 concrete members, out of the 230 needed, were moulded, the stone approch, 150 feet long and 21 feet wide, and slopes about $\frac{2}{3}$, completed. The work was carried out by day labour, at an expenditure of $8,163.62.

In 1905, the remaining 65 concrete members were moulded and the whole superstructure was completed at a cost of $2,587.18.

During October, 1907, the sand filling of head-block, having been previously partly washed out, was replaced by stone, and the bottom of upstream side of approach protected from the strong current by large stones, joint-cemented.

Cost, $831.27.

CHATEAUGUAY.

Chateauguay Basin, a post village in Chateauguay county, is situated at the mouth of the Chateauguay river, five miles from Caughnawaga (Adriondac Junction), nine miles from Montreal.

In the autumn of 1895, the old private wharf at Chateauguay was entirely renewed by the government. A row of close-faced pilework, 145 feet in length, including 128 piles of 12-inch flatted hemlock timber, was driven to an average depth of eight feet along and at an average distance of four feet from the front face of the old wharf. The space between the wharf and the piling, and the depressions and holes in the former were filled with stone, over which a layer of gravel two feet thick was laid for a roadway. Cost, $1,296.47.

During October and November, 1906, the above row of close piles was cut to low water level and a new face composed of a solid wall of concrete, mixed 1·3·5 and properly reinforced with vertical and horizontal 1¼-inch iron bars, was substituted. This wall is 144 feet long, with returns of five feet at both ends, two feet thick at bottom, and one to two feet at top, 6 feet high, with, every 20 feet, 12-foot long anchor bars embedded in one cubic yard blocks of concrete, surrounded with stone. Two 8 by 8-inch tamarac fenders were placed to protect the outside face. Expenditure during fiscal year was $1,495.61.

During June, 1907, a nine-inch concrete flooring, six feet wide, for the whole length of outside face, was moulded, concrete mixed 1·3·5. Other minor improvements, gravelling, &c., were made to right of way from public road.

The expenditure during the last fiscal year amounted to $607.21.

CHICOUTIMI.

The town of Chicoutimi, in the county of the same name, is situated on the south shore of Saguenay river, seventy-one miles above Tadousac and at the head of navigation. The Richelieu and Ontario Navigation Company has a daily service from Quebec to Chicoutimi, during the season of navigation, carrying passengers, freight and mail.

(For details of construction and repairs, see previous reports.)

Spring tides rise 17 feet; neaps, 10 feet.

During the fiscal year 1907-8, a new slip was built; the sheathing of the west side of the wharf renewed; other urgent repairs were also done to the wharf. With a view to rebuild the front of the wharf, materials were brought, chiefly consisting of timber and cement.

The total amount expended for harbour improvements at Chicoutimi was $10,735.58.

CLARKE CITY WHARF (SEVEN ISLANDS).

Clarke City is situated in the Bay of Seven Islands, Saguenay county, on the north shore of the Gulf of St. Lawrence, about 300 miles below Quebec.

The wharf is being built at a point called Pointe Noire, which is situated on the south shore of the bay; from there a railway line, nine miles long, has been built to the falls of St. Marguerite river, where the North Shore Power Railway and Navigation Company are constructing a dam and erecting a pulp mill, of a proposed initial capacity of 250 shipping tons, and final capacity of 500 shipping tons of pulp per day. This pulp will be carried on the railway from the mill to the wharf and there transferred to steamers.

During the session of parliament of 1903, the sum of $25,000 was voted towards the construction of a wharf at Pointe Noire; during the session of 1904, a further sum of $60,000 was voted to buy from the North Shore Power Railway and Navigation Company the part of the wharf built by them, for the sum of $34,433.95, together with a certain quantity of timber and iron to the value of $21,485.34, and to complete the work already begun.

By order in council, March 1, 1904, the transfer by the company was accepted, and an agreement entered into with the company for the performnace of the balance of the work required.

The work already done in 1903 by the North Shore Power Railway and Navigation Company and bought by the department, consisted of a stone approach, 575 feet long, and one crib, 200 by 30, sunk and built to ordinary low tide level.

Work was resumed on May 21, 1904, and continued to October, 27, 1904, when two cribs, 200 feet long by 30 feet wide, respectively, had been sunk in place, the superstructure of these two cribs and of the other one sunk the year before was built to two feet below the required elevation, and the cribs were partly filled with ballast.

Total expenditure during fiscal year 1904-5, $49,881.92. During the winter 1904-5, the second and third cribs suffered damages, and to save the cribs, in 1905-6, certain work was performed to the amount of $37.50.

During the fiscal year 1907-8, a new contract with the North Shore Power Railway and Navigation Company called for the completion of the stone approach; the removal of the broken cribs, and the completion of the wharf to its final elevation.

Work was commenced on May 6, 1907. Nothing was done on the stone approach which remains in the condition it was in 1904. The broken cribs were removed, with the exception of some stone that will have to be taken away, on the north side of the wharf.

No timber work was done on crib 1, but the side pockets were filled; the middle row of pockets are half-full. Since 1904, this crib has settled down one foot; it is now at elevation of 115·00.

Crib 2, the east end of which was broken under low water, was built up to elevation of 107.00; the side pockets are mostly filled, and the middle pockets will have to be filled. Additional vertical posts have been put in to tie the old part of the crib to the new one, and more will be put in next year. Cribs 1 and 2 are each 200 feet long and 30 feet wide.

The old crib, 200 feet long and 30 feet wide, that had been sunk in 1904, was removed and replaced by two other cribs A and B, each 100 feet long and 40 feet wide. No ballast floors were put in these two cribs A and B, except in four pockets, in order to sink them.

Crib A is built nineteen courses high; it was sunk in place on September 2, 1907, and filled with stone; its elevation now is 103·00. While it was being filled, it settled down from two to five inches.

Crib B is built up for 23 courses; it was set in place on October 22, and its elevation is now 105·00. It is being filled with stone. On November 16 it was over half filled, and its filling will be completed this fall.

In summary, there is about half of the cribwork contracted for this year, that is already completed. This would mean that about 65 per cent of the cribwork of the entire wharf is done.

There remains to be done, the completion of the stone approach and the completion of the wharf to its final elevation (including flooring, sheathing, mooring posts, ladders).

There will be stone to be removed from the outside of Cribs A and B, on the north side, also at the junction of crib 2 and A; the sides should be fixed above low water, so that boats would slide along wharf without catching into the expansion of Crib A, five feet on each side, which is caused by its width of 40 feet.

Spring tides rise 12 feet; neaps, 5 feet.

Total expenditure during fiscal year ended March 31, 1908, $1,396.45.

COTEAU DU LAC.

Coteau du Lac, or St. Ignace, is a thriving village on the St. Lawrence, 3 miles from Coteau Station.

In 1888, the construction of a landing pier was commenced and completed in 1889, at a cost of $6,918.71. The structure consisted of: a crib-head block, 101 feet long and 21 feet wide, with a crib extension, 40 by 47 feet, built from the middle of inner face, outer face standing 15 feet high in 10 feet of water at ordinary low level; of a crib and span approach, 75 by 26 feet, and of a freight shed.

From 1894 to 1898, minor repairs were made at a cost of about $1,000.

During 1903-4, work was commenced in renewing the whole of the head-block from low water level; expenditure, $914.36.

These repairs were completed in 1904-5, at a further cost of $710.75.

During July, 1907, the sum of $43 was expended in renewing two broken stringers of span of approach.

CROSS POINT.

Cross Point, Bonaventure county, is situated on the north shore of the Restigouche river, opposite the town of Campbellton, N.B. A ferry boat plies every fifteen minutes between Cross Point and Campbellton.

During the fiscal year 1903-4, a wharf, 455 feet long by 20 feet wide, had been built at that place; that wharf being approached at high water only. To facilitate the traffic, which is very heavy during the summer months, an extension, 390 long, was commenced during the fiscal year 1905-6, and completed in June, 1907.

It is a round-timber construction, well sheathed, ballasted with stone and covered with four-inch spruce planks.

The work has been carried out by contract at a cost of $10,327.

The amount expended during the fiscal year ended March 31, 1908, is $6,996.70.

DESCENTE DES FEMMES.

Descente des Femmes is a new settlement on the north side of the River Saguenay, about 61 miles from its mouth.

To promote colonization in that part of the Saguenay district, which has no other communication than by water, the construction of a wharf at this place was commenced in 1903.

The work done, during the last fiscal year 1907-8, was the completion of the wharf and the construction of a freight shed.

Amount expended, $996.68.

The wharf at La Descente des Femmes is now 219 feet long by 22 and 35 feet wide, 41 feet high at outer end, of which 13 feet are above the level of water, at low spring tides.

DESCHAMBAULT.

Deschambault, county of Portneuf, is a flourishing village on the north shore of the St. Lawrence and on the Canadian Pacific Railway, 41 miles from Quebec. A steamer plies semi-weekly to and from Quebec.

During the last fiscal year an expenditure of $331.10 was incurred in completing the roadway approach to the government wharf. This new outlet, which is 582 feet long, was opened for the accommodation of the western portion of the parish.

DESJARDINS.

Desjardins village, on Allumette island, county of Pontiac, is situated on the north shore of the Ottawa river, opposite the town of Pembroke, where most of the traffic for an important agricultural district finds rail connection. To accommodate the ferry traffic ,a public wharf was built at this place in 1904-5, and later improved.

The structure consists of: a landing head, of open-face cribwork, 120 by 36 feet, carrying 6½ feet of water and built to a height of eight feet; an approach, 527 feet long, 16 feet wide, built of similar construction and stone riprap, with two line wrought iron hand railing; a freight shed, 18 by 18 feet, and waiting rooms. (For further details of construction, see report for fiscal year 1906-7.)

During the fiscal year 1907-8, the sum of $94.20 was paid for stone supplied, the previous year, on wharf improvements.

DOUGLASTOWN.

Douglastown, situated in Gaspé bay, is a village of fishermen and farmers, standing on the rising ground on the south side of the entrance to the St. John river. Its population is between 1,600 and 1,800.

The pier was lengthened by a crib of 80 feet, built towards the shore up to two feet above low water level; all the necessary material for the completion of the pier and the repairs to the old work was bought.

Expenditure, $3,890.67.

EAST TEMPLETON.

East Templeton, in the county of Wright, is located on the north shore of the Ottawa river, six miles below the city of Ottawa. The Canadian Pacific Railway, north shore line, has a little station at this point, one and one-half miles back of the river. There are two wharfs owned by the East Templeton Lumber Company. The local traffic is shared by the Ottawa River Navigation Company, Ottawa Forwarding Company and tramp steam barges.

The old wharf, used by the Ottawa River Navigation Company, and a free site having been vested in the Crown, a contract was entered into, on July 25, 1907, with Mr. John Lowry, of Ottawa, for the construction of a pilework wharf, for a bulk sum of $6,994. Work was started in August, 1907, and completed in April, 1908.

The structure consists of: a landing head, 37 by 101 feet ,of pile-work built parallel to the shore; a pile-trestle approach, 19 feet wide and 66 feet long, continued by a stone approach of same width and 40 feet in length, for upper level; a low-level road approach, 18 feet wide, 106 feet long, and graded; a two-storey freight shed, 18 by 18 feet, supported on pile-work; a timber platform, 18 by 19 feet, between freight shed and approach on lower level, and a riprap retaining wall 150 feet long, around freight shed and part of lower approach. The wharf is built on two levels, 6 and 16 feet above low water stage, carrying 8 feet of water along the front and provided with suitable slips, batter fenders and ice-breakers.

Expenditure during the fiscal year 1907-8, $7,524.91.

ESCOUMAINS.

Les Escoumains, in the county of Saguenay, is situated on the north shore of the River St. Lawrence, twenty-one miles below Tadousac. A very important sawmill, the property of the Saguenay Lumber Company, is located at this place.

During the year 1907-8, repairs were done by day labour to the wharf built in the years 1904-5-6. (For details of construction see previous reports.)

On November 23, 1906, a contract for an extension of 200 feet was awarded to Mr. Thos. P. Charleson, for the amount of $12,445.

The work done by the contractor, during the year 1907-8, consisted in sinking two piers of 100 feet each; the extension is nearly to its full height and well loaded with stone.

Total expenditure for the fiscal year ended March 31, 1908, $11,729.43.

FABRE.

Fabre, a post village 11 miles south of Ville Marie, on the Quebec shore of Lake Temiskaming, is the centre of a thriving farming district in Pontiac county.

A public wharf was built in Lavallee bay, in 1906-7. (Particulars of construction in report for fiscal year 1906-7.)

The wharf was improved, in the spring of 1907, by the addition of two small ice-piers, framed on pile-work 12 by 16 feet, placed 40 feet apart and 40 feet north of wharf, and by further reinforcing with braces, &c., and replacing the piles, which had been damaged by ice shoves the previous year.

Expenditure during the fiscal year 1907-8, $378.01.

FATHER POINT.

Father Point, in the county of Rimouski, is on the south shore of the St. Lawrence, six miles below the town of Rimouski Most of the ocean liners call to land or take on their pilots. The Point is one of the few places on the south shore of the St. Lawrence where deep water can be found at a relatively short distance from land.

A self-registering tidal gauge was established here some years ago by the Department of Marine and Fisheries. There are also a powerful compressed air fog-horn and an acetylene gas light-house.

In the year 1905, a wharf was completed ; dimensions are 800 feet in length, 32 feet wide at the top, with the outer end standing in 18 feet of water at low water spring tides.

In the month of June, 1906, during a fog, the steamer *Pomeranian* struck the wharf at about 300 feet from the outer end. The damages were considerable and heavy repairs were necessitated. Part of these repairs were performed during the year 1906-7, by day labour, at an expenditure of $7,345.47.

During the last fiscal year, the repairs have been completed, and the length of the wharf reconstructed was 140 feet. On the west side, in order to close an opening under low water line, which had been caused by the impact of the steamer, pitch pine piles, 12 by 12 inches, 35 to 40 feet long, were driven through the bottom and well secured to the face timbers; a length of 30 feet was sheathed in this way. All the mooring posts, the cap timbers, the upper end and a depth of face of 18 inches of the sheathing were painted with two coats of red oxide of iron. In order to counteract the action of the waves and current, in scouring and washing out the bottom, causing the wharf to settle down on the east side, about 20 toises of stone were thrown along the east face, placed and packed with the aid of a diver.

The expenditure, for year 1907-8, was $3,408.07.

GARTHBY OR BEAULAC.

Garthby Station is a post village in Wolfe county (municipality de Beaulac), on Lake Aylmer, and a station on the Quebec Central Railway; it is a fine summer resort for the residents of Sherbrooke. The population is 950.

At the end of January, 1908, work was commenced on the construction of a landing pier at the foot of St. James street, near the Quebec Central Railroad station.

The whole consists in close-faced cribhead block, 40 feet long, outside face, and 30 feet wide, standing 10½ feet high in 4½ feet of water at lowest level; stone approach, 320 feet long, 12 feet wide clear at top, with a 12-foot widening on eastern side, half way between head block and shore, leading to a 12-foot slip; sides are riprapped and sloped one in one.

Up to March 13, 1908, when work was suspended on account of high water, the wharf had been about 80 per cent completed, at an expenditure of $3,178.30.

GATINEAU POINT.

Gatineau Point village, in the county of Wright, is at the intersection of the Gatineau and Ottawa rivers, two miles from Ottawa.

In 1885-6, a cribwork wharf for local traffic and a pile-work retaining wall, protecting the bank and roadway on the upstream side, were built. After undergoing various repairs, the wharf was rebuilt in 1904-5 and the retaining wall was replaced in 1905-6 by a permanent structure of concrete cribwork. (For details of construction, see report for fiscal year 1906-7).

During the fiscal year 1907-8, minor repairs to the wharf and backfilling of wall amounted to $23.02.

GEORGEVILLE.

Georgeville, a post village in Stanstead county, 9 miles from Smith's Mills, 10 miles from Memphremagog Lake, which is reached by B. & M. Railway steamers, and 10 miles from Magog Station on the Canadian Pacific Railway.

The landing pier at this place was built by subscription from the several steamboat companies, which kept it in repair until 1888, when its control was assumed by the government. At that time, it had a total length of 210 feet and a breadth of 18½ feet, and was supported on six cribs; a wing of 56 feet by 12 feet had been added at the outer end where the depth available at ordinary low water was about 9½ feet.

During the years 1888-9, some urgent repairs were made, at a cost of $661.43. In 1889-90, the sum of $1,925.27 was expended in the construction of two cribs 12 feet wide, 37 feet long, and 16 feet high, which were set in front of and firmly bound to the head of the wharf. The whole wharf was rebuilt from low water mark and raised two feet higher than its former level. In the course of 1895, the approach to the landing block being defective, the municipality removed the flooring and platform between the shore and fifth pier, and filled the whole with a solid earth and stone embankment 160 feet long. In 1897-8, some stringers were renewed and the whole outer block was replanked. A new waiting-room was also built at a cost of $678.96.

In 1901, minor repairs to the flooring, &c., for $161.51 were made.

During 1904-5, more extensive repairs calling for an outlay of $1,016.70 were undertaken; these consisted chiefly in the removing of five tiers of timber from the front and three tiers from one end of the wharf and the replacing of same with 12 by 12-inch timber. The head-block was completely filled with stone and floored, the same as the approach, with layers of sand and gravel one foot thick.

During July and August, 1907, a sum of $110.67 was expended in placing three-inch planks near and along the outside face of wharf and in front of the store-houses, and in regravelling head-block and approach.

As it stands to-day, the structure consists of: a crib head-block of irregular shape, 75 feet long along outside face, and from 20 feet wide at northern end to 42 feet adjoining approach; a stone approach, about 156 feet long and from 20 to 23 feet wide, with sides riprapped, and two store-houses and waiting-room, one 25 by

15 feet, and the other 7 by 5, were erected at northern intersection of approach and head-block.

GRANDE RIVIÈRE.

Grande Rivière, county of Gaspè, is the name of an important fishing centre, some 21 miles southwest of Percé.

The outside end of the pier, as well as 150 feet of the outside face, was covered with sheath piling, and the top of the pier on that distance raised one foot.

The expenditure for the year amounted to $2,703.73.

GRINDSTONE.

Grindstone is a villge on the south side of Grindstone island, four miles east of Etang du Nord.

The population is composed mostly of Scotch farmers and Acadian fishermen.

For years past, most of the freight for the Magdalen islands has been landed here and the building of a landing pier was greatly needed.

In the fiscal year 1901-2, a landing pier was started ; one hundred and fifteen feet of close-faced cribwork, on an average width of 23 feet and of an average height of 15 feet, was built.

An approach of 605 feet, 25 to 50 feet wide, and of an average height of 9½ feet on the outer face, was built along the eastern side of Grindstone Cape. The outside face of the approach exposed to the heavy easterly gales from the Atlantic ocean, is protected by a sheathing of split spruce held in place by two sets of walings fastened by cross-ties and a double set of posts. A mattress of brush was laid under the filling taken from the cape.

During the fiscal year 1902-3, the pier was extended 255 feet, with an average width of 25½ feet and an average height of 19 feet to floor level.

In fiscal year 1903-4, the pier was extended 200 feet with an average height of 22 feet and an average width of 28½ feet.

During the fiscal year 1906-7, a crib, 100 feet by 30 feet wide by 28 feet high, was built, secured into position and completed.

In the last fiscal year, the last crib was levelled up to coping and the balance of the fenders and walings on the whole length of the pier were placed in position together with the sheathing at the outside end. The posts, caps, top of sheathing and fenders were painted.

The amount expended was $1,580.35.

Spring tides rise 4 feet; neap tides, 2 feet.

GRONDINES.

Grondines, a post village in the county of Portneuf, is situated on the north shore of the St. Lawrence, forty-eight miles above Quebec, on the line of the Canadian Pacific Railway.

During the last fiscal year, at opening of navigation, the long movable fenders, on outer end of wharf, the portable freight shed and the iron guard posts and chains had to be put in place; the removal and storage of same, after closing of naivgation, were also attended to.

Expenditure, $47.15.

GROSSE ILE.

Grosse Ile is situated in the River St. Lawrence, some 30 miles below Quebec. It is used by the government as a quarantine station for all steamers coming up the River St. Lawrence. On February 6, 1907, a contract was entered into with Mr. Napoléon Trudel, for the construction of an extension to the Eastern or Hospital

wharf for the sum of $22,467. This construction consists of a close-faced timber crib, 100 feet long and 50 feet wide. The whole of the construction is now completed.

Expenditure, $23,993.94.

HOPETOWN.

Hopetown is a post settlement, next to Paspebiac, county of Bonaventure.

A protective crib, 35 feet long, 16 feet wide and 7 feet high, has been built at Chatterton's lane ; the earth work, on a distance of 1,000 feet, was also repaired and an approach to beach at John Tennier's has been commenced.

Total expenditure for the fiscal year, $497.46.

HULL.

Hull, the shire-town of the county of Wright, is situated on the Ottawa river, opposite the city of Ottawa. It possesses unrivalled water powers, used by a number of saw-mills, a pulp and paper manufactury, a match factory, &c., &c.

A permanent wharf was built here in 1901-3, at a cost of $54,049.76. The structure consists of: a landing block, 130 feet wide and 70 feet deep built up to three different levels, in ten feet of water, and constructed of a cribwork substructure up to the water level, and superstructure of concrete masonry walls with piling between them; an approach from shore to the landing block, 403 feet long, built up to three different levels, consisting of dry rubble masonry walls with filling between them; a gas pipe railing on both sides of the approach for a length of 718 feet ; a substantial freight shed 50 by 40 feet and two stories high, and a roadway on Ste. Elizabeth street, 600 feet long, 30 feet wide and protected on both sides by riprap walls having a batter of one in one.

Minor repairs since have cost $127.35.

During the fiscal year 1907-8, the cost of maintenance was $183.

IBERVILLE.

Iberville is an incorporated town in the county of the same name, on the Richelieu river, opposite the town of St. Johns. Population, 1,512.

In March, 1889, a wharf was begun at the foot of Market street and completed the year following at a total cost of $8,883.26. The structure consists of:—

Stone embankment, 130 feet long and 24 feet wide, with slopes of one in one and a guard railing.

Trestle approach, 150 feet long, also 24 feet wide, with a guard railing on both sides.

Pile head-block, 150 feet long, 40 feet wide, with two slips; inner guard railing, and a storehouse, 20 by 24 feet. The outer face stands 15 feet high in six feet of water at lowest level. In order to facilitate handling of freight, a horse derrick was placed on wharf.

In 1901, minor repairs cost $17.48.

During 1903-4, half the floor of head-block was renewed, that of the approach was redoubled for a width of eight feet and the storehouse and iron guard railing painted; expenditure, $412.84.

In September, 1906, very urgent repairs to the flooring of head block were made at a cost of $140.74.

During September, 1907, one-third of the flooring was renewed and the storehouse, railing and coping were repainted, at a cost of $454.08.

ILE-AUX-COUDRES.

This island has an area of 30 miles, and is situated in the county of Charlevoix, some 62 miles below Quebec. The distance from the island to the north shore of the River St. Lawrence is 2½ miles. Its population is 1,500.

During the present fiscal year, we have renewed flooring on a length of 255 feet. Some 600 feet of floor stringers and 320 feet of coping were also replaced.

The expenditure amounts to $946.34.

ISLE PERROT, NORTH.

Isle Perrot, North, is a post town in Vaudreuil county, two miles from Ste. Anne de Bellevue.

In 1897-8, a small wharf, with a right of way on the north side of the island, was purchased for the purpose of providing a convenient landing on the Ottawa river shore. This right of way is 400 feet long and extends from the public road to the wharf, the first 355 feet having a width of 30 feet and the remainder, near the river, a width of 100 feet. The wharf is close to and parallel with the shore; it is 20 feet wide by 52 feet long at the head.

In June, 1898, a close-faced timber outer block, 80 feet long, 20 feet wide and 19 feet high, was built and sunk close to the old wharf in 13 feet of water. The work, done by day labour, was completed, including approach, in June, 1899, at a cost of $3,328.71.

During 1904-5, minor repairs called for an expenditure of $40.41.

Further repairs by day labour were begun at the end of August, 1907, and completed in the middle of October. The head-block was raised one foot and floored in six-inch concrete mixed 1:3:5.

Storehouse, 16 by 20 feet, on head-block, was repainted and the approach and roadway generally improved. The expenditure was $1,012.65.

ISLE VERTE.

The village of Isle Verte, in the county of Temiscouata, is situated on the south shore of the St. Lawrence, sixteen miles below Rivière du Loup and 130 miles east of Quebec.

Spring tides rise 19 feet; neaps, 12 feet.

Owing to the growing traffic in sea-grass, and to give people engaged in that industry more facilities for landing, a slip, 210 feet long and 12 feet wide, was constructed on the west side of the wharf.

Repairs were also made to the outer block; 3,689 feet of stringers and cross-ties were replaced and a new flooring laid upon a surface of 4,000 square feet, with spruce deals 3 inches thick. A length of 60 feet of hand-rails was placed on the west side of the wharf, along the new slip.

The expenditure for the year 1907-8 amounted to $1,734.98.

KAMOURASKA.

The village of Kamouraska, in the county of same name, is situated on the south side of the River St. Lawrence, 90 miles below Quebec; it is a well-known place, much frequented as a summer resort.

Spring tides rise 19.5 feet; neaps, 12 feet.

During the fiscal year 1907-8, the planking of the wharf, being much worn, was renewed, on a length of 230 feet by a width of 25 feet, with spruce deals 3 inches thick, and repaired on a length of 250 feet.

Capping pieces, 115 feet long, were also replaced.

On the old block, standing to the west side of the wharf, and which was repaired a few years ago, and is now used as a shelter, the north face and part of the west one

making altogether a length of 260 feet, were sheathed with spruce 4 inches in thickness, sunk 18 inches into the bottom, the height of face being 16½ feet.

Twenty-six spruce fenders, 8 by 8 inches, have been placed every 10 feet between the sheathing.

With a view to further repairs, spruce deals and other timber were secured for the amount of $294.

The total expenditure for the fiscal year is $1,199.15.

KNOWLTON LANDING.

Knowlton Landing, a post village in Brome county, is situated on Lake Memphremagog, eight miles from Magog station on the Canadian Pacific Railway, with which it is connected by steamer.

During the fiscal years 1891-2, an extension to the pile wharf at this place, built many years before, was constructed. This extension, 51 feet by 75 feet, was built of hemlock piles covered with stringers and 3-inch planking at a cost of $971,22. There is a depth of 9 feet at low water at the end of the present wharf, which will permit of steamers calling at all stages of water.

During the next year, repairs were made and a warehouse with waiting-room, 40 feet by 23 feet, was built on shore immediately west of the wharf, the whole at an expenditure of $918.09.

In the fiscal years 1899-1900, the sum of $714.13 was expended by day labour in repairing the wharf and the storehouse.

In 1904, several caps and stringers were renewed, general overhauling of the flooring made and two iron nigger heads substituted for the old hemlock mooring posts. Expenditure, $237.51.

In March, 1907, extensive repairs were begun, consisting chiefly in renewing the whole of the flooring of head-block with 3-inch pine planks, and in rebuilding the approach entirely in stone 20 feet wide at top with sides riprapped and sloped 1 in 1. A 2-inch pipe railing with 6-inch cedar posts every 10 feet will complete the improvements. During the year, all repairs were completed, with the exception of the riprap of the approach. Expenditure, $1,181.93.

As it stands to-day, the wharf is composed of a pile head-block, 75 by 25 feet, and of a stone approach, 128 feet long and 20 feet wide at the top, with sides riprapped and sloped 1 in 1.

LAC À BEAULIEU.

Lac à Beaulieu, in the municipality of Les Grandes Bergeronnes, is situated three miles north of the village.

During the fiscal year 1907-8, the blasting and removing of boulders commenced in 1903, to enlarge the outlets of the lake, were continued at an expenditure of $204.14.

LAKE ST. FRANCIS, AT LAMBTON.

Lambton, or St. Vital de Lambton, a thriving post village in Beauce county, in rear of Lake St. Francis, 36 miles from St. Francis, the county town.

On February 15, 1907, a contract, in the sum of $7,750, was entered into for the construction of a landing pier at Lambton. It called for a solid, close-faced and stone-filled crib head-bock, 70 feet long and 30 feet wide, the outside face standing 20 feet high in eight feet of water at extreme low level.

Stone approach, 320 feet long and 18 feet wide at top, with sides riprapped and sloped 1½ in 1.

Work was begun at the end of February, and, at the end of March, 1907, the head-block had been sunk in place and about half completed and the stone approach was commenced.

Work was continued in April, 1907, suspended in May on account of high water and resumed in March, 1908. The work is completed, except the riprapping of approach. Expenditure for 1907-8, $4,257.95.

LANORAIE.

Lanoraie is a post village of 600 population, in Berthier county, on the River St. Lawrence, five miles from Lanoraie station on the Canadian Pacific Railway.

In 1884, the construction of an isolated block, 70 by 30 feet at the bottom, and 54 by 27 on top, was commenced at a distance of 240 feet from shore; the work was completed in 1885, at a cost of $5,032.01.

In 1885-6, the block was connected to shore by an approach, 240 feet long, 25 feet wide, and at an average height of 12 feet, at a cost of $6,886.36.

From 1885 to 1906, repairs were made to the wharf almost yearly, amounting to $8,438.96.

In August, September and October last, the down-stream corner of head-block was removed to low water level, rebuilt and sheathed with ⅜-inch steel plates. Part of the flooring was also removed. The total expenditure for the last fiscal year was $417.55.

As it is to-day, the structure consists of: a crib head-block 70 by 30 feet at bottom and 54 by 27 feet at top, forming an ice-breaker standing 23 feet high in 11 feet of water at low level: a crib approach, 240 feet long by 25 feet at top, with ice-breaker inclined 1½ in 1.

LAVALTRIE.

Lavaltrie is a post village in Berthier county, on the St. Lawrence river, eight miles from Lavaltrie road station on the Canadian Pacific Railway, and 44 miles northeast of Montreal.

In November, 1907, materials were bought to repair and enlarge the old wharf purchased the preceding year by the Crown from the Richelieu and Ontario Navigation Company, for $1,800. This property is composed of: crib head-block, 65½ feet by 31 feet at bottom and 56 by 31 at top, to form an ice-breaker.

Crib approach 150 by 19 feet.

Right of way, 50 by 130 feet, leading to public road.

In November and December, 1907, the razing of head block to low water level was begun; work was suspended on account of high water. Expenditure, $3,609.77.

It is intended to rebuild in close-faced cribwork the whole of the structure from low water level and enlarge downstream side of head-block by a pile addition of 36 by 40 feet. When completed, the whoe flooring shall stand 11 feet 9 inches above zero gauge. The depth of water along outside face of head-block will be eight feet at lowest level.

LES CUISSES D'ALMA.

Les Cuisses d'Alma, in the Little Décharge, parish of St. Joseph, is three miles from Lake St. John, and seven miles from the village.

There are three rocks, called Cuisses d'Alma, and an island obstructing the Little Décharge.

During last fiscal year, the work done was the continuation of the blasting, commenced in 1901-2, to enlarge the channel.

Amount expended, $994.50.

LES EBOULEMENTS.

The village is situated on the north shore of the River St. Lawrence, 70 miles below Quebec.

During the present fiscal year, the whole of the flooring of the wharf was renewed, 20 new fenders on the northeast face were placed; the whole of the sheeting of the outside face was renewed; the northeast corner that had been broken by the ice was made anew, and a complete new movable slip was constructed.

The expenditure for the fiscal year 1907-8, amounts to $3,005.25.

LIMOILOU.

Limoilou is a small town situated on the north shore of the River St. Lawrence, opposite Quebec.

On Seeptember 16, 1907, a contract was entered into with Mr. P. F. McLaughlin for the construction of a landing and protection wall for the sum of $2,600.

At the end of the fiscal year, the whole of this work was completed apart from the macadam covering, at a cost of $1,861.55.

LONGUEUIL.

Longueuil, the chef-lieu of the county of Chambly, is situated on the south shore of the St. Lawrence, nearly opposite the eastern end of the city of Montreal.

Construction.—The Richelieu and Ontario Company owns a wharf at the upper end of the town, but its long distance from the business or centre portion, and the increasing trade, demanded new wharfage accommodation. At the request of the town council, the department therefore decided in 1886 to build a landing pier at the foot of Alexander street.

In November, 1886, a contract was entered into for the construction of the outer portion of the pier, which was commenced at a distance of 675 feet from shore. It consisted of a close-faced cribwork structure, 430 feet long and 20 feet wide, apart from its outer 90 feet, which was 30 feet wide. It was completed in 1888 at a cost of $12,491.66.

In October, 1889, another contract was entered into for the construction of a block, 40 feet long and 50 feet wide, along the lower face of the existing pier at its outer end; of a close-faced cribwork extension to shore, 675 feet long and 20 feet wide, with buttresses 10 feet wide along its lower face. The work was completed in 1891, at a cost of $16,248.30. The landing pier was then 1,105 feet in length, including the block at the outer end, which was 40 feet long and 80 feet wide; the first 90 feet of the pier adjoining the block was 30 feet wide and the remaining 975 feet to shore 20 feet wide. The outer face of the block was 16½ feet high above the bottom of the river, and stood in 7 feet of water at extreme low water.

Repairs.—The portion of the pier completed in 1888 was damaged by ice in the spring of 1889, which necessitated an expenditure of $1,517.77 for repairs.

During the spring of 1892, the head of the pier was damaged, and the block, 40 by 50 feet, built in 1890, was carried 10 feet down stream. The opening was filled with cribwork and the plank covering was removed and replaced with stone and gravel at a cost of $2,198.63.

In the spring of 1893, the head of the pier, with the adjoining 180 feet, was moved bodily 13 feet down-stream by the ice. In order to give additional weight to that portion of the pier which is the most exposed to the action of drift ice, in 1894 a crib, 250 feet long, 12 feet wide and of an average height of 13 feet, was built, and the area between it and the original structure filled level with the top of the pier. The work was done by day labour at a cost of $2,948.70. In 1895, the remaining portion, 104 feet in length, of the work, commenced in 1894, was completed, and the spaces between the buttresses were filled with close-faced cribwork. The expenditure incurred was $4,214.19. In 1896, 1897 and 1898, minor repairs were made to the amount of $729.33.

During the fiscal year 1898-9, extensive repairs were made to the upper face of the wharf at its outer end, which had been completely broken up by ice. The damaged

portion was removed and rebuilt with close-faced timber 220 feet long, 20 feet wide and 18 feet high. A wing, 50 feet long and 20 feet wide, terminated at its upper end by an ice-breaker, 26 feet high, was built on the western side of the wharf at its outer end and at right angles with it. The work was done by day labour at a cost of $9,986.59. During the fiscal year 1899-1900, the work was continued and completed, at a cost of $2,017.21.

In 1902-3, 500 lineal feet of the top pier was renewed and the upstream side of the wharf, on a height of 4 feet and a length of 500 feet, was sheathed with ⅜-inch boiler plates. Cost, $1,123.33.

In October, 1906, very extensive repairs and renewals were begun. Part of 12 by 12 timber on upstream side of wharf was renewed, some 1,200 lineal feet of hemlock being used, and the laying begun of a substantial 1:3:5 concrete flooring, including a 6-foot sidewalk on upstream side, from 4 to 8 inches thick and reinforced with transversal and longitudinal 1½-inch iron bars. Total flooring area covered in 1906 was 17,715 square feet. Cost, $6,285.14.

In July, August, September and October of 1907, the outer part of headblock, downstream of slip, 70 by 12 feet, accidentally burned last spring, was rebuilt and resheathed from water level; the slip widened from 9 to 12 feet; 175 feet long of upstream side of approach near shore resheathed with 3-inch tamarac and ⅜-inch steel plates, and about 15,280 square feet of 7-inch concrete flooring, mixed 1:2½:5, and properly reinforced with iron bars, was laid, at a cost of $4,213.83.

As it stands to-day, the structure is composed of a crib head-block of irregular form some 412 feet long and from 29 to 110 feet wide, 16½ feet high, sunk in 7 feet of water, with small ice-breakers 18 feet wide at outer end, and of a close-faced crib-work, 641 feet long and 29 feet wide.

LOTBINIÈRE.

The village of Lotbinière, in the county of the same name, is situated on the south shore of the St. Lawrence, forty miles above Quebec. It has no railway communication, and entirely depends, for exchange of supplies, on bateaux and steamers from Quebec.

Spring tides rise 14½ feet; neaps, 8½ feet.

The work done during the last fiscal year consisted in the removal of ice which had piled on the inshore end of wharf in April; in the placing of movable long fenders at outer end and of mooring and guard posts, together with 1,800 feet of wire and chain-guard railing.

The roadway approach from public highway to wharf was also improved.

Amount of expenditure, $446.69.

LOUISEVILLE.

Louiseville is a town, in the county of Maskinongé, 21 miles west of Three Rivers.

A portion of land was purchased for the sum of $375 for the purpose of building a wharf.

The work was commenced by day labour on October 15, 1907, and was completed March 7, 1908.

The expenditure for the fiscal year ending March 31, 1908, amounts to $7,358.48.

MAGOG.

Magog, a progressive incorporated town in Stanstead county, is situated on the Magog river, at the northern end of Lake Memphremagog. Steamers on the latter make daily trips, in the navigation season, between Newport, Vt., and Magog. It is a station of the Canadian Pacific Railway, 88 miles east of Montreal, and 18 miles southwest of Sherbrooke.

In order to accommodate the local trade, a landing pier was purchased in August, 1875, for the sum of $2,500.

In 1896-7, the most urgent repairs to the flooring were effected at a cost of $154.82.

In 1899, a number of broken planks in flooring were renewed at a cost of $49.

During the year 1899-1900, three-fourths of the flooring were renewed and a new storehouse and guard-railing built at a total cost of $530.07.

In 1901-2, minor repairs were made at a cost of $11.34.

During 1903-4, extensive repairs were begun. The landing pier had become dangerous owing to decay and the roadway in a bad state. The latter, the property of the Canadian Pacific Railway, was moreover very incommodious on account of passing trains and a change of site was decided upon. To that effect permission was obtained from the town council to build a stone approach from the foot of Lake street to the head of the pier, a distance of 200 feet; it was made 26 feet wide at the top with ordinary slopes. The head-block was widened 8 feet for its whole length 40 feet, and entirely renewed in caps, stringers and floorings.

These were about one-third finished, at the end of June, 1904, at a cost of $1,806.58 and completed in 1904-5, at a further expenditure of $3,241.13.

In August and September, 1907, the damage done by ice in April was repaired; seven piles were driven at southeastern corner of head-block, binders securely bolted and some flooring renewed. Cost $193.20.

MALBAIE.

Malbaie, in Gaspé county, is a small fishing settlement, about five miles from Barachois de Malbaie.

During last fiscal year, the sum of $673.27 was expended towards buying timber for the proposed landing pier and breakwater at Malbaie.

Expenditure, $382.45.

MANITOU RAPID.

Manitou rapid is on the Batiscan river, St. Stanislas, county of Champlain. Work has been done at that place to improve the channel for the floating of logs and rafts, by the removal of boulders from the channel.

The expenditure for the fiscal year ending March 31, 1908, amounts to $746.40.

MATANE.

The village of Matane, in the county of Rimouski, is situated on the south shore of the St. Lawrence, at the mouth of the River Matane, 240 miles below Quebec and 30 miles east of Little Metis, the nearest point on the Intercolonial Railway. It is a prosperous place which contains extensive saw-mills; important shipments of lumber to European markets are made every year.

Spring tides rise 15 feet; neaps, 8 feet.

During the fiscal year 1907-8, heavy repairs were made on the wharf; the outer part, 150 feet in length, 22 feet wide, having been undermined by the current, leaned towards the east with a difference in elevation of 4 feet; it was levelled and a new planking laid. The superstructure of the shore part, 241 feet long, 30 feet wide, which was entirely decayed and worn out, was renewed on a mean height of 4 feet. The approach, 130 feet in length and 20 feet wide, was also rebuilt. The sheathing of the east face was renewed with spruce planks 6 inches thick, on a surface of 3,060 square feet. Some temporary repairs were made to the breakwater standing on the west side of the entrance of the river, which had been severely damaged during a heavy storm in the fall of the year 1906, and a considerable quantity of timber was purchased to complete the necessary repairs.

The expenditure amounted to $4,971.15.

MILLE-VACHES.

Mille-Vaches is a village in the county of Saguenay, situated on the north shore of River St. Lawrence, about forty-two miles below Tadousac.

During the fiscal year 1905-6, the construction of a wharf was commenced. An approach, 45 feet long and 25 feet wide, and four piers, 20 by 20 feet, with a space of 25 feet between each pier and the abutment, were built of flatted round logs open-face cribwork. The structure was provided with fenders, 8 by 10 inches, and fully ballasted with stone.

In 1906-7, four other piers of the same dimensions were constructed.

The work done during the last fiscal year was the completion of the outer pier, 40 by 20 feet, and filling in the space between the head pier and the next, in order to prevent action of the current.

Total expenditure for 1907-8, $3,947.26.

MISTASSINI.

Mistassini, in the county of Chicoutimi, is a settlement on the river of the same name, near its confluence with Rivière au Foin, or Mistassibi. It is 36 miles to the northward of Roberval, on the west side of Lake St. John, and 18 miles above the mouth of River Mistassini, on this lake.

In the month of March, 1897, a public wharf was built for the accommodation of the rapidly increasing number of settlers.

The structure consists of fully ballasted close-faced timber, 30 feet long, 30 feet wide, and 20 feet high at the outer end, and is floored over with 3-inch plank. Along the outer face there is a depth of 5 feet at low water.

Expenditure, $680.99.

During the fiscal year 1907-8, general repairs were done to the planking of the wharf, the slip and freight shed were repaired.

Amount of expenditure, $312.43.

MONT LOUIS.

Mont Louis, a village of considerable importance, and the first municipality below Ste. Anne des Monts, is 135 miles below Metis, the nearest Intercolonial Railway station.

The harbour of Mont Louis, the largest and best situated on the St. Lawrence, Gaspé coast, offers good water and protection against all except northerly winds.

During the last fiscal year, the sheathing on the outside face of the wharf, which had been carried away by a severe storm, was replaced, and a portion of the pier filled to flooring with ballast.

Expenditure, $429.22.

MONTMAGNY.

Montmagny, in the county of the same name, is on the south shore of the St. Lawrence, thirty-seven miles below Quebec. It is a thriving little town of over 2,000 inhabitants. Important shippings of lumber are made by the Price Brothers Company to European markets.

Besides a pulp mill, there are two foundries, iron works and saw-mills.

The town is built on both sides of Rivière du Sud, which has a perpendicular fall of 20 feet and empties into the St. Lawrence. Below the fall ,the river expands and forms what is called the 'basin,' affording shelter from winds for vessels of moderate draught.

Near the entrance of the 'basin,' on the west side of it, stands the government wharf, but, owing to certain conditions of the bottom and the want of proper shelter, this wharf does not meet the requirements of the place.

To accommodate the growing traffic and to provide for the necessary shelter, the department decided to build another wharf at the rear end of the 'basin,' and, on December 30, 1907, a contract was entered into for the construction of a landing pier of the following description: The new pier consists of a shore section or approach, open-faced, 220 feet long and 20 feet wide, together with an outside section, close-faced, 125 feet long and 30 feet wide on top, with a batter of 1 in 12 on the sides and outer end; the two sections forming an angle of 114:50. At the close of the fiscal year the amount of $465.66 had been expended.

Spring tides rise 21 feet; neaps, 12 feet.

MONTREAL HARBOUR, LOWER DIVISION, MAISONNEUVE.

On July 25, 1905, a contract was entered into with Messrs. Poupore & Malone, for the construction of a high level pier and two bulkheads in the lower division of Montreal harbour. Contract price, $631,033.33; work was commenced during the same year. In 1900-1, the expenditure amounted to $49,296.45; in 1901-2, to $201,722.69; in 1902-3, to $251,320.47; in 1903-4, to $209,104.96; in 1904-5, to $74,442.69; in 1905-6, $67,855.80, and in 1906-7, $18,229.82.

During the fiscal year ended March 31, 1908, the sum of $150,777.21 was expended in completing the work, viz.; in levelling the material to proper lines on approximately one-third the total area and in laying the stone surfacing on an area of about 450,000 square feet. Contract is now completed.

MOOSE BAY, LAKE MEGANTIC.

Moose Bay is a small settlement about midway between the wharfs at the end of Lake Megantic.

It is proposed to build a wharf composed of:

A headblock, 40 feet outside face and 30 feet wide, open-faced cribwork, under water and closefaced above, standing 13 feet high in 7 feet of water at lowest level.

A crib approach, 105 feet long and 20 feet wide, also open-faced under water and close-faced above.

A stone approach, 65 feet long and 20 feet wide at top, with sides riprapped and sloped one in one.

The right of way is to be given to the Crown by the village of Piopolis.

Up to March 31, 1908, materials only had been purchased at a cost of $1,537.44.

MURRAY BAY.

The village of Murray Bay is situated on the north shore of the River St. Lawrence at the mouth of the River Malbaie, 83 miles below Quebec.

During the present fiscal year, the flooring of the wharf and the hardwood sheeting on half of the southwest facing was renewed. New fenders were placed where the government ice-breaker *Champlain* lays during the winter.

Minor repairs were also made to the waiting room and freight sheds.

The expenditure for the fiscal year 1908 amounts to $4,938.35.

NEW CARLISLE.

New Carlisle, a seaport town and a port of entry, is the shiretown of the county of Bonaventure.

During the session of 1906-7, the sum of $4,000 was voted towards making repairs to the wharf at New Carlisle, which at the northeast corner had settled down some 14 feet.

The construction, upon a distance of 215 feet, has been renewed and raised to its normal height. In order to prevent further accidents, the easterly and seaward sides have been protected by piles, driven from 15 to 20 feet into the bottom.

Total expenditure during the fiscal year, $4,334.30.

NEWPORT.

The village of Newport, in the county of Gaspé, is situated at the mouth of the river of the same name, on the north shore of the Baie des Chaleurs, 88 miles east of Campbellton, N.B., and 50 miles west of Caplan.

Spring tides rise 4½ feet; neaps, 2½ feet.

The population of the village is extensively engaged in fishing.

The top of the wharf, damaged in the fall of 1906, was repaired, at a cost of $185.04.

NICOLET JETTY (AT MOUTH OF NICOLET RIVER).

Nicolet is a flourishing town in Nicolet county, situated at the foot of Lake St. Peter, on the Nicolet branch of the Intercolonial Railway.

In order to protect schooners, loading in the harbour, from the force of storms on Lake St. Peter, a jetty was commenced in 1881 and added to every successive year. It was originally 3,500 feet long, made of two rows of close-piles, 13 feet distant and filled with stone. It stood 4 feet above low water with an average height of 5½ feet.

In 1891, some piling was done, making jetty 3,762 feet long.

Dredging in the river and repairs to the jetty were done yearly at a cost as follows:—

Year 1882 to June 30, 1900, construction, repairs and dredging		$148,780 54
" 1900-1	dredging and repairs	7,489 19
" 1901-2	" "	4,795 88
" 1902-3	"	3,999 27
" 1903-4	"	11,723 81
" 1904-5	construction, repairs and dredging	10,320 53
" 1905-6	repairs and dredging	9,483 40
" 1906-7	repairs, exclusive of dredging	5,002 75
" 1907-8	" " "	4,998 86
Total to March 31, 1908		$206,594 23

Out of the expenditure 1904-5, a small wharf was built, during February and March, along the river, about one and one-half miles from Nicolet and opposite the old Ball mill. It was a close-faced crib block, 80 feet long including ice-breaker inclined 1½ feet in 1 and 31 feet wide. It will be of great utility to the Nicolet trade, as this point is the nearest to the town, that boats of 6 feet draught can reach safely. A right-of-way to above wharf, 250 feet long and 80 feet wide, was purchased at a cost of $400. Total cost of wharf and right-of-way, $3,503.06.

In 1905-6, repairs to jetty were made for a length of 1,800 feet; it was raised with stone 2 feet on its whole width of 13 feet, and, for another 1,800 feet, it was protected on upstream side by a stone ice-breaker inclined 2 in 1 with an 8-foot base. Some further protection filling was done at the outside end for a length of about 100 feet. The whole was done by day labour and called for some 3,500 cubic yards of stone.

From August to the end of October, 1906, some 3,000 cubic yards of stone were placed all along the jetty.

Stone-filling was continued in August, 1907, and suspended in the middle of September until next year; some 3,216 cubic yards of stone were put in place, by day labour, at a cost of $4,998.86.

NOTRE DAME DU PORTAGE.

On the south shore of the St. Lawrence, six miles west of Rivière du Loup, in the county of Témiscouata, is situated the village of Notre Dame du Portage; the place is much resorted to in summer by tourists.

Spring tides rise 19 feet; neaps, 12 feet.

With a view to completing the construction of the wharf, which was begun in the year 1904, materials, timber and stone were purchased during the last fiscal year; nearly enough material, necessary for the completion of the wharf, are now lying on the site of the work.

The wharf, as it stands now, is 400 feet long, 28 feet wide at the head, by a height of 23 feet at the outer end.

The expenditure for the last fiscal year was $2,399.37.

PASPEBIAC

Paspebiac, Bonaventure county, is a seaport and an important fishing station; it is also, for over a century, the headquarters of the great fishing firm of C. Robin, Collas & Co.

During the big storm of November, 1906, which had devastated the Atlantic coast, the wharf,built in 1904-5, was broken and partially carried away by the sea. The construction upon a length of 225 feet, by its full width of 30 feet, has been undone to low water level and rebuilt with square timber to its normal height, 12 feet above L.W.S. The south side upon its full length of 400 feet has been protected by a close-piled sheathing driven into the bottom till refusal. Piles were also driven at the outer end and along the north side of the wharf.

These repairs were executed by day labour at a cost of $6,079.33.

PERCÉ.

Percé, the county town of Gaspé, is situated on the Gulf of St. Lawrence, 36 miles from Gaspé basin.

On October 3, 1904, a contract was entered into with Lyons & White for the building of an extension of 150 feet to the northeast pier.

As the old pier had settled from nine inches to over two feet in places, it was decided to level it and to bring the new work to the same height.

During the last fiscal year, the shed was painted two coats, together with the posts and cap pieces of wharf; a chimney was built and a stove and pipe bought; a crib was constructed along embankment to prevent it from falling on the shed and roadway.

Total amount expended in 1907-8 for construction and improvements for Percé wharf, $9,813.87

PETIT BONAVENTURE

Petit Bonaventure is a fishing settlement situated between the village of St. Bonaventure and St. Charles de Caplan, in the county of Bonaventure.

The work done consists of a protection crib, 45 feet in length, 10 feet in width and 8 feet in height. The earth work, previously done, was also repaired on a length of 150 feet.

The mouth of the river, having been choked and closed up by a gravel bar thrown by the easterly gales, was causing a great deal of damage to the fishing industry. The new channel, running easterly inside of the gravel bar, had to be closed up by a training pier, 85 feet long, 12 feet wide and 9 feet high. A channel, 75 feet long by 30 feet wide, was opened through the gravel bar into the bay.

The work has been performed by day labour at a cost of $681.25.

PETITES BERGERONNES.

Les Grandes and Les Petites Bergeronnes are two rivers in the parish of Les Bergeronnes, situated on the north shore of the St. Lawrence, 14 miles below Tadousac.

The work done during the fiscal year 1907-8 consisted in the removal of boulders which obstructed the channels in both rivers.

Expenditure, $1,543.71.

PHILIPSBURG.

Philipsburg East, originally Missisquoi Bay, is an incorporated village of Missisquoi county, on the east shore of Missisquoi bay.

In July, 1895, a contract was entered into for the construction of a wharf. It was completed in 1897, at a cost of $11,142.89, the municipality having contributed $4,000. It consists of a close-faced cribhead block, 120 feet long and 25 feet wide; of a trestle work approach, 296 feet long and 30 feet wide, and of a stone and earth embankment, 285 feet long and 30 feet wide at top, with side slopes at 1½ to 1. The outer face of breakwater is 17½ feet high, sunk in 7½ feet of water at low level.

In April, 1897, the embankment was considerably damaged by ice. It was repaired in July following at a cost of $711.79.

During April and May, 1903, the flooring of part of the head-block and approach was renewed; some repairs were also made to the front sheathing and to the stone embankment. Cost, $580.67.

In the spring of 1905, the head-block was slightly damaged by ice. Repairs were made in August and September following. These consisted chiefly in replacing some face-timbers on southeastern corner and renewing some of the outside sheathing and about one-third of the flooring. Done by day labour at a cost of $339.83.

On February 7, 1907, repairs to the flooring, not done the preceding year, were begun, and about one-half completed on March 31.

These were completed in April, 1907, at a cost of $580.63. Half of the flooring was renewed, as well as 130 lineal feet of capping of head-block and 470 feet of that of approach. The face sheathing was also repaired.

PICHÉ POINT.

Piché Point, on the Quebec shore of Lake Temiscaming, is five miles from the population centre of Guiges township, Pontiac county, and six miles from Haileybury, Ont., an important port. The public road to Piché Point is being improved by the provincial government, in consideration of a public wharf being built, for which a right of way has been given free. Although the wharf at Ville Marie, eleven miles distant over a good road, offers a roundabout means of water communication to the mining centres, farmers transport large quantities of hay, oats and cheese direct to these markets over winter roads. It is claimed that with a wharf at Piché Point, settlers would benefit by the higher prices obtainable for their produce in summer and the interchange of passenger traffic would be greatly improved.

Parliament having granted the sum of $8,450 in 1907, for a wharf, contract plans were prepared for a pilework structure, to consist of an approach, 18 feet wide, 278 feet long, leading to a trapezoidal head, sheeted, protected by ice-breaker 192 feet long, and a freight shed 17 by 28 feet.

On February 3, 1908, a contract was awarded to R. Brewder for the construction of this wharf for the bulk sum of $8,700.

Work had not commenced before the end of the fiscal year, but the sum of $366.28 had been expended for preparation of plans, calling for tenders, surveys, &c.

POINTE À ELIE.

Pointe à Elie, is the extreme southeasterly point of Allright island, two miles east of the House Harbour Catholic church. The steamer *Amelia* calls at Pointe à Elie for mails and freight, and for shelter during northeasterly storms.

During the fiscal year 1902-3, a length of 115 feet by 22½ feet wide of the pier proper was constructed; 850 feet of roadway, from 25 to 50 feet wide, and of an average height of 9 feet, was also built of stone, with a timber facing held in place by walings, posts and cross-ties. In 1904, a length of 100 feet was added.

During the fiscal year 1904-5, a crib, 100 feet long and 26 feet wide, was built up to 18 inches to low water level and secured in position.

During the winter, 1904-5, the last crib, built up to 18 inches above low water mark, suffered greatly through ice and heavy storms; the top timbers were carried away and a large part of the stone ballast thrown out.

During the fiscal year 1906-7, the 100-foot crib commenced, was placed in position and completed, and a new crib of 100 feet was commenced ashore and the roadway widened in places by blasting and removing solid rock.

During the last fiscal year, the outside 200 feet were built up 18 inches to coping; the whole of the outside face besides the outside crib was sheathed with black birch; the outside face work of the shore end, for a length of 54 feet, has been raised 3½ feet, and a wing, 42 feet long by 11 feet high, has been built on the east side to protect top of bank.

The new crib, commenced on shore, was built up to 18 feet and the launchway, damaged in a storm, was thoroughly repaired, but the launching had to be delayed until this spring on account of unfavourable circumstances. Some 450 cubic yards of stone ballast has been taken out ready for sinking of crib.

The total expenditure during the last fiscal year was $5,079.19.

Spring tides rise 4 feet; neaps, 2 feet.

POINTE CLAIRE.

Pointe Claire, an incorporated village in Jacques Cartier county, is situated on Lake St. Louis, 14 miles from Montreal.

On October 26, 1898, the government entered into an agreement with the Grand Trunk Railway Company for the lease of their wharf for a period of 20 years, and for a consideration of $150 a year.

The work is a solid embankment of stone and earth, 1,000 feet long by an average width of 45 feet, situated at the foot of Grand Trunk avenue.

During 1899, a close-faced cribhead block, 125 feet long, including ice-breaker, 24 feet wide, and 16 feet high, was built at the end of embankment and at right angles with it, forming a T. Cost $4,022.06.

In 1899-1900, a storehouse was erected at the intersection of the head-block and approach, and the latter repaired at a cost of $665.25.

During December, 1907, the flooring of head block was relaid in three-inch pine planks, the top ties of 12 by 12-inch hemlock, cap piece of 12 by 4-inch pine and southeastern corner of 12 by 12-inch hemlock were renewed, and the latter sheathed with eight-inch tamarac.

Four ⅜-inch steel plates, five feet by five feet, were securely bolted on each side of both slips, and the storehouse improved.

Expenditure, $798.81.

POINTE ST. PIERRE.

Pointe St. Pierre, county of Gaspé, is situated at the western entrance of Gaspé bay, twenty-one miles from Gaspé Basin, and fifteen miles from Percé.

The roadway, from the public highway to the pier, was properly built up and a wire fence erected.

Works performed during last fiscal year also included the removal of obstructions along inside of the wharf, and the raising of the top of the pier.

Expenditure, $382.52.

POINTE VALOIS (OR CAVAGNAL).

Cavagnal is a post office in Vaudreuil county, 1½ miles from Como, a station on the Canadian Pacific Railway, and a port of call of the steamers of the Ottawa River Navigation Company.

During the fiscal years 1890-1-2, the original pier was extended by adding, at the outer end, a block of ballasted cribwork, 135 feet long by 21 feet wide, with a return eastward, 55 by 25 feet. The depth of water available at the outer end of the wharf is now 6¼ feet at low water.

From 1896 to 1901, general repairs were made amounting to $1,121.29.

During the spring of 1905, the head-block and stone approach were slightly damaged by ice, and repaired at a cost of $204.76.

In May and June, 1906, considerable improvements were made to the approach; the 20-foot span connecting said approach was raised one foot and topped with a layer of gravel and small broken stone; substantial guard railing, composed of eight-inch cedar posts every 10 feet and 1½-inch iron pipes, completed the repairs at a total cost of $600.

During the autumn of 1906, the whole head-block was raised to low water level and entirely rebuilt at a cost of $891.07.

During September and October last, the stone approach was raised one foot with small broken stone, gravel and sand, and the storehouse and guard railing painted. Cost, $563.80.

As it stands to-day, the structure consists in a head-block, 75 by 25 feet, formed of two close faced cribs, 25 by 25, 25 feet apart, and a guard railing along inner face; stone approach, 300 feet long and 20 feet wide at top, with guard railing on both sides; freight shed, 15 by 12 feet, at corner of downstream crib.

PORT DANIEL.

Port Daniel is situated on the north side of the Baie des Chaleurs, 45 miles from Percé. Its population is 1,200, mostly engaged in the fishing industry.

During the fiscal year, the sum of $499.59 has been expended towards urgent repairs to the wharf, which repairs consisted in renewing three courses of face-timber on the westerly side, upon a length of 110 feet; replacing old ties and stringers and repaving the inner part upon a length of 100 feet, by the full width of the wharf. A slip, on the east side, has also been filled up.

Some large boulders, which were very dangerous to the outgoing and incoming of boats, were removed from Anse de Port Daniel West, at a cost of $199.88.

Total expenditure for the fiscal year, $699.47.

PORTNEUF.

Portneuf is a village in the county of Saguenay, situated on the north shore of River St. Lawrence, about fifty miles below Tadousac.

The wharf, which was commenced in 1904-5, is 160 feet long and 20 feet wide, and consists of an abutment, 50 by 20 feet; two piers, 20 by 20 feet, and an outside pier, 20 by 60 feet, a space of 25 feet lying between each pier.

The work done during the fiscal year 1907-8 was the completion of the sheathing of the wharf.

Expenditure, $348.59.

Spring tides rise 14 feet; neaps, 8½ feet.

PORT ST. FRANCIS.

Port St. Francis is a port of call of the Richelieu and Ontario Navigation Company, (Montreal and Three Rivers) in Nicolet county, four miles from Three Rivers.

During the autumn of 1905, the old private wharf, consisting of a crib headblock, 210 feet long and from 30 to 37 feet wide, together with a stone and earth approach, 250 feet long by 36 feet wide, and a foot right-of-way leading to public road, were purchased at a price of $3,000.

In October of same year, this wharf was razed to E.L.W.L., and reconstructed for a length of 110 feet, the new width varying from 12 to 37 feet. The whole work, done by day labour, was completed October 31, 1905, and immediately opened to traffic. Cost of reconstruction, $1,996.16.

During June and July, 1907, a freight shed, 30 by 20 feet was constructed in separate panels so as to be easily removed every autumn.

The expenditure during the fiscal year ended March 31, 1908, was $638.69.

QUEBEC HARBOUR.

In the year 1902, it was decided to build an extension, in a northerly direction, to the breakwater built many years ago on the river front of the harbour of Quebec.

The extension consists of timber cribwork, seated on a rubble stone foundation, with a concrete superstructure, 21 feet high from the level of 3 feet above low water spring tides up to 6 feet above high water spring tides. The available depth at the outer face of the work will be 42 feet at low tide.

The length of the extension is 1,460 feet on the river front and a return face of 200 feet at the northern end; the back of the cribwork and concrete wall is filled with dredged material for a width of 150 feet.

The work is being carried on under four different contracts with E. Dussault & Co., of Levis, Que., for the total sum of $770,389.75. The first contract was signed May 8, 1903, and the last one on March 30, 1906.

At the end of the fiscal year 1907, the crib seats were dredged out and all the cribs but one had been sunk in place and fully ballasted.

During the fiscal year 1907-8, the last crib was sunk and the concrete superstructure was built on a length of 700 feet, including the 200 feet return wall. The filling was brought up to the level of high water spring tides.

The work is now partly being used for landing passengers and freight by the *Empress* steamers of the Canadian Pacific Steamship Company.

The amount expended during the fiscal year ending March 30, 1908, was $187,038.52.

The work is now nearly completed.

QUEBEC (CUSTOM HOUSE WHARF).

The top of part of the Custom House wharf was completely renewed. The work done consists in replacing 5 layers of faced timber, longitudinals and cross-ties; the sheating and flooring were renewed, and a new railing was placed.

The expenditure for the fiscal year 1907-8 amounts to $1,051.31.

REPENTIGNY.

Repentigny is a post village in L'Assomption county, on the St. Lawrence, seventeen miles northeast of Montreal.

On August 10, 1904, a contract was entered into between the Crown and Lachance Brothers, of Ottawa, for the construction of a wharf opposite the Juneau property, about four-fifths of a mile from the village, at a price of $10,975. It called for the building:—

Of a close-faced crib head-block, 73 feet 6 inches long by 40 feet wide, standing 19 feet high in 7 feet 3 inches of water;

Of a close-faced crib approach, adjoining head-block, of a length of 230 feet and a width of 16 feet;

Of a stone approach, 435 feet long and 18 feet wide at top, with slopes of one in one on both sides, the whole forming a length of 705 feet.

In order to place the proposed wharf the nearest possible to the centre of the village, a change of site was decided and that opposite the Telesphore Thouin property chosen, thereby lengthening the stone approach from 435 feet to 748 feet, and the whole structure from 705 to 1,018 feet, but without modifying in any way its other dimensions. A further arrangement was made in December with the contractors, whereby they agreed to the change at an extra of $5,039 above original contract price.

Work was begun early in January, 1905, and suspended on account of high water at the end of March of the same year. The stone approach was then two-thirds completed and the cribwork approach built to a mean height of six feet and fully ballasted. Expenditure during 1904-5 was $6,498.95.

Construction was renewed in September following. At the end of June, 1906, the crib head-block and crib approach were completed, except the last two tiers and flooring. Some 60 toises of stone and riprapping on both sides would complete the stone approach. Expenditure during 1905-6 was $5,330.50.

At the end of fiscal year 1906-7, the structure was about 92 per cent completed. In October, on account of an extra sinkage of the head-block and crib approach, an estimate for an extra of $2,631.69 was made in favour of contractors. Total paid during year, including inspector's salary, was $4,997.19.

During last fiscal year, a further extra was allowed contractors on account of supplementary sinkage of stone approach, bringing total expenditure for last fiscal year to $3,231.50. At the end of March, 1908, the structure was about 97 per cent completed.

RIGAUD.

Rigaud a post village and seigniory in Vaudreuil county, on the Rivière à la Graisse, two miles south of the wharf, a port of call on the Ottawa river; is a station on the Canadian Pacific Railway (Montreal to Ottawa' short line), eighteen miles northwest of Vaudreuil, and forty-one miles west of Montreal. It is eight miles east of St. Eugene, Ont., on the same line, and seventy-five miles east of Ottawa.

During the summer of 1907, the Crown bought from Capt. Mallette, a wharf built in 1890, and situated on the east side of Rivière la Graisse, some 200 feet above the Canadian Pacific Railway bridge, for the sum of $3,000.

It is a close-faced cribwork structure of a length of 133 feet, parallel with the current, by a height of 15 feet, sunk in 7 feet of water at extreme low level, and filled in with stone and gravel. The right-of-way and ground in connection with the wharf has a width of 115 feet at the public road and 133 feet along the wharf by a length of 140 feet. A two-story wooden freight shed, with masonry foundation, of a length of 90 feet and a width of 40 feet, is erected thereon.

During July and October of same year, minor repairs to storehouse cost $48.85. Total expenditure 1907-8 was $3,102.50.

RIMOUSKI.

The town of Rimouski, in the county of the same name, is situated on the south shore of the St. Lawrence, 180 miles below Quebec: its population is about 3,000. It is an important station on the Intercolonial Railway; it is also the place where the Royal mails are transferred from steamers to railway. The harbour offers safe shelter for vessels of moderate draught.

Spring tides rise 16 feet; neaps, 9 feet.

The widening, repairing and other works of improvement, undertaken in May, 1904, were continued and very nearly completed during the fiscal year 1907-8. The following works were also performed:—

Cribwork, 838 feet in length, 22 feet wide, on a mean height of 18 feet, constructed on the east side of the wharf going shoreward; the whole length was completed and filled with stone. The new work, which is open-faced, was sheathed with elm and birch six inches thick, the planks being driven into the bottom a depth of three to five feet.

At the shore end, to complete the widening of the wharf, a terrace 144 feet long, four feet high, was built and paved with spruce deals three inches thick. A slip of 42 feet in length, 11 feet wide, has been constructed at right angles to the wharf, near the shore end. The wharf is now 40 feet wide throughout its length. On the outer end, in order to place a siding for the cars, the flooring, on a surface of 13,000 square feet, was levelled and raised to a mean height of five inches; the flooring between the rails of the siding and of the main line was doubled with spruce deals three inches thick, on a surface of 5,300 square feet. The surface of the wharf around the coal shed ,about 800 square, was renewed on a height of four feet and a new planking laid on. On the east face of the outer end, sheet piles 10 by 10-inch spruce, 30 feet high and driven 10 feet into the bottom, were placed upon a length of 80 feet; a length of 77 feet was also sheathed with elm six inches in thickness, 26 feet high, sunk to a mean depth of 10 feet into the bottom. Lastly, 28 posts, 30 feet long, were placed upon the wharf to carry an electric light system upon the wharf. These works were done by day labour.

According to an agreement, dated September 16, 1906, 'The Credit Municipal Canadien' placed upon the Rimouski wharf, a system of electric lights, composed of some 35 lights of 32-candle power; the lights were disposed so as to give the greatest efficiency, and the transferring of the mails during the night is thereby much facilitated.

The cost of the installation was $283.

The expenditure during last fiscal year amounted to $29,647.60.

Dredging.

On July 2, 1907, articles of agreement were entered into with 'The General Construction Company, of Montreal,' for dredging at the Rimouski wharf.

Dredging was needed to improve the service of the Royal main tender and to permit this steamer to embark and disembark the mails at any stage of the tides.

Three dredges went to work, but owing to bad weather and to defects in the plants, little progress was made. The work done amounted to 16,978 cubic yards of material removed, and the expenditure under that head was $11,300.87.

RIVER RICHELIEU.

Booms at St. Johns.

St. Johns, a delightfully situated town, is the 'chef-lieu' of the district of Iberville, on the Richelieu river, twenty-seven miles from Montreal.

In order to give much needed assistance to boats passing through the swing span of the Vermont Central Railway bridge at St. Johns, a boom was constructed.

It has a length of 350 feet by a width of four feet, and is moored to clusters of six piles each, driven 15 feet into the ground every 50 feet, except the upstream cluster, which has ten piles and is protected against the ice by a steel plate, six feet by six feet, ⅜-inch thick. The piles of each cluster are well secured together by screw bolts. The boom stands in nine feet of water at extreme high water level. The timber used is 12 by 12-inch hemlock for the booms, and round pine and oak 12 inches at butt end, for the piles. The work was commenced in November and completed in April, 1901, at a cost of $1,504.45.

During the spring of 1904, the head and two intermediate clusters of piles were broken by the ice, and the boom was also much damaged. A close-faced cribwork ice-breaker, 20 by 12 feet and 18 feet high, was built ,in place of the head cluster of piles, to moor the boom; the two broken clusters of piles were renewed, the boom was repaired and sheathed diagonally with 3-inch pine deals. The work was carried out by day labour at a cost, to June 30, of $1,259.88.

In 1904-5, minor repairs to piles and boom cost $206.64.

In March, 1907, the fourth ice-pier was also entirely rebuilt in close-faced cribwork properly ballasted with stone. The pier is 12 feet by 16 feet for a height of 10½ feet from bottom and 3 feet 9 inches by 12 feet at top, the upstream face being slanted 1½ inches in 1, sheathed with 8-inch spruce, and covered at corners by ⅜-inch steel plates. Cost, $730.91.

During last autumn, the downstream section of boom was better floated by the addition of cedar logs laid close under and across the 12 by 12-inch hemlock and securely bolted to it. Stone was also bought.

Expenditure, $1,351,35.

RIVER ST. FRANCIS AT RICHMOND.

Richmond, a progressive town in Richmond county, is situated on the east bank of the St. Francis river. On the opposite side of the St. Francis river is Melbourne village, which is practically a suburb of Richmond, and is connected with the latter by a fine bridge.

During the spring freshets, almost every year, the town of Richmond is flooded to a height of 5 or 6 feet, owing to ice-jams formed in the River St. Francis, at a place called 'The Narrows.' In order to prevent the occurrence of these ice-jams and the consequent floods, it was decided to build four ice-breakers, three above 'The Narrows' and one above and opposite the pier of the municipal bridge. In December, 1902, a contract was entered into for the construction of the four ice-breakers, for the sum of $10,317. The works were commenced in February, 1903, and completed in December of the same year.

Later, it was decided to build four additional ice-piers, 150 feet above a dam in the St. Francis river, about ten acres upstream of the bridge. To that effect an agreement was entered into with the same contractors, September 28, 1903, for the construction of four additional ice-piers of close-faced cribwork, 18 by 12 feet, to a height of 2 feet above the level of the water, fully ballasted, for the sum of $4,000. The work was completed in December of the same year.

In June, 1904, the slanting faces of the four ice-breakers were sheathed with ⅜-inch steel plates, and the upstream corners of the four ice-piers above the dam, sheathed with ¼-inch steel plates, at a cost of $628.91.

During March, 1907, the three piers, above 'The Narrows,' were resheathed on the northeast side with three-inch pine plank and reinforced on the southwest side with some 260 cubic yards of stone.

In November, 1907, the blasting to low water level of the rock point on the Melbourne side, 150 feet below the abutment of the municipal bridge, was begun. Length 200 feet by a width of about 50 feet. This to have the double effect of straightening the course of St. Francis river and to furnish material in order to better protect the three ice-breakers above 'The Narrows.' The work was completed on the 23rd, at a cost of $1,565.82.

RIVIÈRE À LA PIPE.

Rivière à la Pipe, is a small village situated on the north shore of Lake St. John, at the mouth of the river of the same name, seven miles north of Grande Décharge

The wharf is situated on lot No. 118, township Taillon, about one mile westward of Rivière à la Pipe. It is built in a southerly direction, about 75 feet from shore, for

a length of 200 feet and a width of 25 feet, and extends to 8 feet depth at the mean summer level of Lake St. John.

It was built of close-face cribwork up to 18 feet, during the year 1897-8, and stands 25 feet high.

The Quebec government has built a good road from the public road to the present wharf, a distance of two miles.

During the year 1899, an addition, 50 feet long by 30 wide, was built, at the outer end of the wharf, to facilitate approach.

During the year 1900, the outer block was raised 5 feet, sheathed for a length of 120 feet and replanked; 35 toise of stone were also placed in the work.

In 1905-6, a certain quanity of timber was bought in view of the extension of the wharf, and the outside pier, which is 40 by 25 feet, was removed and placed to form the outer end of the wharf. Two cribs, 20 by 25, were built at 25 feet from old work and 25 feet apart.

Amount expended during the year, $4,145.99.

During fiscal year 1906-7, one of the two piers having been removed by ice, had to be partly rebuilt, and a portion of the wharf near shore end, 30 feet long, was also damaged by ice. A third pier was built, and the superstructure over the two first was constructed.

During the fiscal year 1907-8, a pier, 73 by 30 feet, was sunk; the superstructure of the said pier, of the third one and of the outside block was continued. The work done is open-faced cribwork with round logs faced outside and the whole is fully ballasted.

Amount expended during the year, $3,994.71.

RIVIÈRE BLANCHE.

The sum of $100 was expended to close a stairway on the outer block of the wharf; it has been filled with timber and stone, and a planking laid on top. The staircase was of no use to navigators and a nuisance to the circulation upon the wharf.

RIVIÈRE BLONDELLE.

This is a small river, tributary of the River St. Lawrence, situated in the parish of St. Joachim, in the county of Montmorency.

This river is navigable for small sailing vessels in the lumber trade.

During the fiscal year, two curves were straightened that were great impediments to navigation.

The expenditure for the fiscal year 1907-8 amounts to $2,152.23.

RIVIÈRE DU LIÈVRE LOCK.

This lock is situated at Poupore, on the Rivière du Lièvre, twelve miles above Buckingham, in the county of Labelle. It was built to overcome the Little rapids at that place and to drown the Long rapids, eleven miles farther up the river, thus giving a continuous stretch of navigation as far as High Falls, a total distance of twenty-four miles. This waterway is indispensable to the settlers of the upper part of the Lièvre who have no railway accommodation and only a poor highway, opened some few years ago. (Full particulars of construction, reconstruction and improvements, in reports for fiscal years 1899, 1900, 1905-6 and 1906-7.)

The lock, which was damaged by the great landslide of October 11, 1903, was repaired and improved in August-October, 1907, at a cost aggregating $4,000.

The old stop-log cofferdam was reinforced, sheeted and puddled anew. The lock chamber was emptied, the lower gates were reset, cleaned and repaired and the upper gates were adjusted; the method of operating gates was changed from chains in

wells at bottom to chain-spars at top. All woodwork and ironwork was painted. The masonry was repaired and the joints were repointed. An oak fender was added to protect the breast wall from pounding by vessels, and a timber partition was placed across the bottom to restore the lower gate basin. In March, 1908, the sheathing of the dam underwent minor repairs.

When navigation opened in May, 1907, the portage roads, maintained since the landslide occurred, were abandoned and a temporary landing was built about one-quarter mile below the lock, at the then head of navigation. The dredged channel was buoyed and transportation of passengers and freight was kept up until the end of September, when the lock was reopened to navigation.

Dredge No. 2 resumed operations in July. A turning basin was first made at the temporary landing and then one cut was made through the landslide to reach the lock. The debris, which had been removed by hand from the lock chamber and dumped below the cofferdam, were cleared away. The dredge was locked through on September 17, and worked until October 5, removing the landslide debris from the channel above the lock.

Total expenditure for the fiscal year ended March 31, 1908, including dredging, $10,900.60.

RIVIÉRE DU LOUP.

Rivière du Loup, or the town of Fraserville, is the chef-lieu of the county of Témiscouata. It is situated on the south shore of the St. Lawrence, 115 miles below Quebec.

It is a thriving little town of 5,000 inhabitants, which contains several manufactories, including two pulp mills.

The Rivière du Loup Point, where the wharf is located, is distant two miles from the village; it is one of the best known and most frequented summer resorts of the St. Lawrence.

Spring tides rise 19 feet; neaps, 12 feet.

During the last fiscal year, the following heavy repairs were performed on the Rivière du Loup wharf: The whole superstructure of the head-block, a surface of 15,770 square feet, which was decayed and worn out, was entirely renewed on a height varying from four to six feet; every piece of timber was replaced, and the waiting-rooms, freight sheds and lighthouse have been raised as much as 15 inches and the whole surface levelled up.

From the head block going shoreward a length of 160 feet by the whole width of the wharf, 30 feet, the superstructure was also renewed upon a height of five feet, all timbers being replaced. The face-timbers, on the east side of the wharf, were sheathed with spruce five inches thick, on a surface of 10,100 square feet; four ladders were placed where needed.

The cap timbers and mooring-posts, on the part renewed, have been painted.

The wire fence around the government's ground, which was destroyed by fire, was rebuilt upon a length of 200 feet. Minor repairs were done to the whole planking and to the buildings standing upon the head of the wharf.

These works were performed by day labour during the months of June, July, August and September, at a cost of $7,998.04.

RIVIÈRE GIRARD.

A small wharf was built on the east side of the mouth of Rivière Girard, about 1½ miles below Isle Verte church, the dimensions being, 160 feet in length, 12 feet wide on a mean height of 8 feet.

As there are many people engaged in the sea-grass industry at Rivière Girard, this little landing pier will greatly facilitate and help that trade.

The amount expended was $1,499.28.

RIVIÈRE OUELLE.

The pier is situated at Pointe aux Orignaux, five miles distant from the village of Rivière Ouelle, in the County of Kamouraska, on the south shore of the St. Lawrence, opposite Murray Bay.

A branch of the Intercolonial Railway, built from Rivière Ouelle station to the outer end of the wharf, connects with a steamer which crosses the St. Lawrence several times a day during the summer season, calling at Murray Bay and other places on the north shore. In winter, the service is also daily.

Spring tides rise 20 feet; neaps, 12 feet.

On January 5, 1906, a contract was awarded to Messrs. Geo. St. Pierre & Co., for the construction of a spur, at the western end of the head pier; the work was carried on and nearly completed during the nine months of the fiscal year ended March 31, 1907. The crib is 50 feet long, 33 feet wide and 41 feet high; it is built of round timbers, 13 inches in diameter at the small end. From the level of three feet below low water spring tides, the sides and outer end are sheathed with concrete 18 inches in thickness, moulded with a batter of 1¼ in 12. The work is intended to afford protection, against ice, for the ferry boat when standing at the outer end. The contract price was $7,745. During the fiscal year 1907-8, the spur was completed.

A sum of $529.28 was also paid for birch delivered in the previous year and required for the sheathing of the west face of the wharf.

In the month of October, some repairs were made to the track and to the planking of the wharf, at an expenditure of $299.96.

A guard or railing was constructed on the new part of the wharf, for the protection, during winter, of passengers, and some minor repairs have also been made to the movable slip and to the sheathing of the outer end of the wharf, at a cost of $134.40.

The total expenditure for the fiscal year ended March 31, 1908, was $4,411.24.

RIVIÈRE OUELLE—DREDGING.

Dredging was required around the wharf at Rivière Ouelle, to allow the steamer *Champlain*, plying daily between Rivière Ouelle and Murray Bay, to draw near and stay at the wharf at any time during summer and winter.

On July 2, 1907, articles of agreement were entered into with 'The General Construction Co.,' of Montreal, to perform the necessary dredging.

During the months of July, August and September, 35,925 cubic yards of material, clay mixed with stone, were removed.

Good progress was made and better depths of water are now available along the sides and at the outer end of the wharf.

The expenditure incurred on Rivière Ouelle dredging for the fiscal year 1907-8, was $24,923.25.

ROBERVAL.

The town of Roberval, in the county of Chicoutimi, is built on the east side of the River Ouichouanish, near its mouth, on the south shore of Lake St. John, 200 miles east of Quebec city. It is the northern terminus of the Roberval branch of the Quebec and Lake St. John Railway, which taps the main line at Chambord station.

In 1892-3, the department purchased from H. G. Beemer for the sum of $750, together with the right of way to the public road, an isolated block of cribwork, 75 feet long by 30 feet, which had been built by him at the mouth of the river, 425 feet from the shore of the lake.

During 1892-3 and 1893-4, this block was connected with the shore by means of an approach, 425 feet long and 25 feet wide, at a cost of $5,469.06.

In 1894-5, a head-block parallel with the shore, 50 by 30 feet and 30 feet in height, with a slip at the outer end, was added, and the entrance to the harbour was deepened and widened. Cost of work, $4,200.41.

In 1897-8, a block of cribwork, 75 feet by 25 feet, was sunk close to the crib, purchased from Mr. Beemer, for the purpose of widening that part of the wharf to 50 feet.

Amount expended, $715.86.

In 1899, the wharf was destroyed by fire and rebuilt, in 1900-1, for a length of 500 feet, a width of 30 feet and a height of 23 feet; a waiting room, 15 by 18 feet, and a freight shed, 15 by 28 feet, were erected on the wharf.

Amount expended, $9,747.82.

During the year 1902-3, the head of the wharf was widened 15 feet on the south side, for a length of 60 feet, by the construction of a block of cribwork; from that block a trestle work was built to the shore.

Amount expended, $4.577.11.

During the fiscal year 1903-4, the greater portion of the trestle work, built last year, was planked over with three-inch plank, and, between trestle work and the wharf, stringers were laid, resting on a cap piece of 12 by 12 inches.

The amount expended was $653.45.

During the fiscal year 1905-6, the planking of the trestle work commenced in 1903-4, was completed.

Amount expended during the year, $585.28.

During the year, the Quebec and Lake St. John Railway had built a track on the wharf from their own track.

During the fiscal year 1907-8, the work done consisted in the renewing of the planking of the wharf and in general repairs.

Amount expended, $1,000.91.

ST. ALEXIS DE GRANDE BAIE.

St. Alexis de Grande Baie is on the south shore of Ha Ha Bay, on River Saguenay, about 63 miles from its mouth.

During the fiscal year 1907-8, the work done was the repairing of the floor.

Amount expended, $984.23.

The wharf, commenced in 1899 and completed in 1905, is 1,565 feet in length by 25 feet in width; 580 feet are built in cribwork, and the balance consists of blocks and spans.

ST. ANDRE.

The village of St. Andrè, in the county of Kamouraska, is situated on the south shore of the St. Lawrence, about fifteen miles west of Rivière du Loup and 100 miles below Quebec.

The place is somewhat frequented as a summer resort; it contains a foundry and an important machine factory.

Spring tides rise 19 feet; neaps, 12 feet.

The wharf, owned by the Department of Public Works, at St. Andrè, consists of an earthen embankment, 850 feet long, a mean height of 6 feet, and nine piers connected by platforms of 30 foot spans.

During the year 1902-3, the earth approach to the wharf was repaired and greatly improved. In 1904, an addition to the wharf was built; it was 80 feet long, 26 feet wide on a height of 18 feet.

During the year 1905-6, a further extension of 100 feet in length had been constructed, the width being 30 feet and the height 20 feet. A slip, 45 feet long, has been built near the inner end of the wharf. The planking and stringers have been

renewed upon a length of 332 feet and a width of 24 feet; 664 feet of capping pieces were also replaced.

In the course of the fiscal year ended March 31, 1907, the repairs to the planking, begun the year before, were continued and completed; 1,182 feet of spruce, 10 inches square, and 15,139 feet B.M. of spruce deals, 3 inches thick, were used to renew the stringers and planking.

A certain quantity of gravel was also put on the earth approach to the wharf and 500 feet long of cap timbers were replaced.

The expenditure for that year amounted to $1,096.28.

During the year 1907-8, a further addition to the wharf, 100 feet in length, 30 feet wide on a mean height of 21 feet, was constructed; the work is close-faced, strongly built with upright posts every 20 feet, screw bolted to the face timbers and thoroughly filled with stone.

In addition to this construction, the following works were performed: the road leading from the highway to the wharf's approach, a distance of 300 feet, was repaired and the surface covered with a layer of gravel 12 inches in thickness.

Two openings, 25 by 15 feet, between the piers of the wharf, were closed with light cribwork, partly filled with stone.

The total expenditure amounted to $6,398.93.

The work was done by day labour during the months of August, September, October and November.

ST. ANDREWS.

St. Andrews, in the county of Argenteuil, is located on the North river, two and three-quarter miles from the Ottawa. It has a population of 1,200, but the district comprises some 5,000 or 6,000 inhabitants, including the town of Lachute, seven miles to the north, on the Canadian Pacific Railway.

On August 21, 1907, a contract was entered into with Chas. E. LaDouceur for the construction of a temporary landing, for the bulk sum of $200. The structure consists of: a landing head, 23 by 12 feet, carrying 7 feet of water, built on trestle; an approach, 29 by 12 feet, of similar construction, and a freight shed, 25 by 12½ feet.

Expenditure during the fiscal year 1907-8, $200.

STE. ANGÈLE DE LAVAL (DOUCET'S LANDING).

Ste. Angèle de Laval is a post village and parish in Nicolet county, on the St. Lawrence river, opposite Three Rivers and near Doucet's Landing, on the Three Rivers branch of the Grand Trunk Railway to Victoriaville and Arthabaska.

On February 8, 1907, a contract was entered into between the Crown and Captain Napoléon Bourgeois of Ste. Angèle for the construction of:—

A pile head block, 85½ feet long and 64 feet 3 inches wide, standing 23 feet 3 inches high in 12 feet of water at lowest level;

Pile approach, 72½ feet long and 20 feet wide for the first 60 feet 6 inches from stone approach, widening to 37 feet at intersection with head block;

Stone approach 26½ feet long and 20 feet wide at top with slopes of 1 in 1 on both sides. Contract price, $4,911.55.

A right of way, 30 feet wide and about 460 feet long, leading from public road to shore, was bought from the estate Thibodeau, at a cost of $400.

Work was begun in the middle of July. Up to March 31, 1908, the structure had been completed with the exception of the stone approach.

Total expenditure for the last year was $5,500.25.

STE. ANNE DE LA POCATIÈRE.

The village of Ste. Anne de la Pocatière, in the county of Kamouraska, is situated on the south shore of the St. Lawrence, 74 miles below Quebec.

Spring tides rise 20 feet; neaps, 12 feet.

The wharf consisted of an approach built of stone and earth, and twelve piers, 20 feet square, connected by platforms of 25-foot spans.

During the winter of the year 1902, this wharf was almost totally destroyed by an ice shove. In March, 1903, a sum of $70.15 was expended to gather and save the broken timbers of the wharf. The reconstruction began in May, 1904; at the close of the fiscal year 1903-4, about one-third of wharf was rebuilt and nearly enough timber to complete the work was bought and paid for. The expenditure amounted to $4,280.70.

During the year 1904-5, the reconstruction was continued; the new cribs were rebuilt more substantially and of greater dimension than formerly, being 30 by 20 feet, instead of 20 feet square. Two openings near the outer end were closed and a stairway was built on the east side of the wharf; the corners of all the piers have been sheathed with spruce, six inches thick.

The expenditure for that year was $4,600.72.

In the months of August and September of the year 1905, the approach to the wharf, built of stone and earth, and which was liable to be scattered by waves every spring, has been rebuilt with timber faces and cross-ties, filled with earth; it is nearly 500 feet in length, on a mean height of five feet.

The expenditure during the fiscal year 1906-7 amounted to $1,199.15.

During the fiscal year ended March 31, 1908, an addition to the wharf, 100 feet in length, 30 feet wide, on a mean height of 19 feet, was constructed; the crib is close-faced, strongly built with vertical posts every twenty feet, screw bolted to the face timbers, and thoroughly filled with stone ballast. In order to provide more shelter to schooners, standing on the east side of the wharf, the addition was placed at an angle with the general direction of the wharf and deflecting towards the east. The work was performed by day labour during the months of August, September and October, and the expenditure was $5,499.12.

STE. ANNE DES MONTS.

The Ste. Anne river flows into the St. Lawrence at the west end of the village of Ste. Anne des Monts, one of the oldest and most important settlements of the Gaspé peninsula, some one hundred miles below the nearest railway station, Little Métis.

Several saw-mills are in operation.

During the month of June, 1906, more materials were bought and work performed towards preparation for improvements at the mouth of the river.

The outside crib, 50 by 22 feet at top, with a batter of 1 in 8, was built up to coping, into five feet of water at low tide.

In the river, the eastern protection work was built for a length of 205 feet, when a very heavy freshet swept three hundred feet of sand bar westward of our protection work, which was in no way disturbed, though not completed at the time.

Some temporary protection work had to be done in the fall to protect the bank, east of the permanent work.

During the last fiscal year, 400 feet of the training pier has been built and a crib of 40 feet sunk in the channel and built up to two feet above low water level.

Expenditure, $5,667.14.

STE. ANNE DU SAGUENAY.

The parish of Ste. Anne du Saguenay is situated on the north shore of the Saguenay river, seventy-two miles above Tadousac and opposite the town of Chicoutimi.

Spring tides rise 17 feet; neaps, 9 feet.

The wharf, which was commenced in 1889 and completed in 1892, now stands 475 feet in length, 30 feet in width for the first 130 feet from shore, 27 feet for the next 325 feet and 100 feet for the last 30 feet; it is 28½ feet high above the bottom of the river, at the outer end, where there is 7½ feet of water, at low water spring tide.

During the last fiscal year, the planking of the wharf was partly renewed, at a cost of $1,033.65.

ST. BLAISE.

St. Blaise is a village in St. Johns county, on the Richelieu river, 4 miles from St. Johns.

In May, 1905, in order to accommodate the important hay, butter and cheese traffic of the locality, the construction of a wharf was begun. The work consisted in the dredging of a trench, some 1,000 feet long from main channel shoreward, by a width of 50 feet and to a depth of 6 feet below E.L.W.L. Alongside the above and from the shore, a row, 175 feet long, of close piles with a return of 27 feet at outer end, and a 25-foot upstream backing of earth and stone, with upstream side riprapped and sloped one in one, from the head of the wharf. These piles were cut five feet above low water, with cap on top and double fenders in front, and retained every five feet by a second series of lower piles embedded in stone and 12½ feet backward, 1½-inch iron anchor bolts 16 feet long securely connecting the two. Part of the above dredged material was used as a filling upstream of the face piles. The stone approach is 487 feet long and 16 feet wide at top with sides sloped one in one with two 20-feet culverts. The right of way from public road to wharf is 2,000 feet long and 25 feet wide.

At the end of June, 1905, work had cost $30.10.

In July and August, 1905, the caps and fenders had been put in place and the filling of head block nearly completed. About three-quarters of the stone for approach was bought and put in place. Expenditure, $1,490.75.

During the autumn of 1907, the structure was completed at a further cost of $788.30.

ST. BONAVENTURE.

The parish of St. Bonaventure, situated at the mouth of the river of the same name, is the most important business centre on the north side of the Baie des Chaleurs.

On January 29, 1908, a contract was entered into with Messrs. Alphonse Noel and N. H. Roy for the construction of a training pier, 1,200 feet long by 22 feet wide, at the price of $24,500.

The work was not begun at the end of the fiscal year.

In order to facilitate the landing of passengers and freight, a temporary approach has been constructed at the mouth of River Bonaventure. The work done consists of a cribwork abutment, 12 by 25 feet, and outer block, 15 by 30 feet.

Total amount of expenditure, $481.07.

ST. CHARLES.

St. Charles, River Richelieu, is a post village in St. Hyacinthe county, on the River Richelieu, 9 miles from St. Hilaire station.

During last summer, the government bought for $300, the old crib wharf, 145 by 25 feet, extending upstream from Union street, opposite the saw-mill, a right of way, 78 by 28 feet, to Alma street, included in purchase.

In September, work was begun on a new pile structure, built immediately in front of the old one, of the same length at top and 24 feet wide, lapping some 4 feet on the crib. It will be composed of 15 bents of five piles each, including those of ice-breaker, and with 12 by 12-inch caps, corbels, stringers and walings, 6 by 12-inch corbels and stringers, 6 by 8-inch binders and fenders, 4-inch outside face sheathing, 8-inch ice-breaker covering and 3-inch pine flooring. It shall stand 18 feet high in 8 feet of water at low level. The old wharf shall be brought, with stone and earth, to the level of the new structure.

Structure not quite completed on March 31, will be available to traffic in May.

Expenditure during 1907-8, $4,810.

ST. CHARLES BORROMÉE.

St. Charles Borromée is a village situated on the north shore of La Grande Décharge of Lake St. John, in the county of Chicoutimi, 21 miles above Chicoutimi.

The work done during last fiscal year was the continuation of the two landing piers commenced in 1905-6; a shed was also constructed on the south shore.

Amount expended, $2,004.27.

ST EDOUARD DES MÉCHINS.

The village of St. Edouard des Méchins, or Grands Méchins, in the county of Rimouski, is situated on the south shore of the St. Lawrence, 35 miles below Matane. It has a population of about 800, which consists chiefly of fishermen and lumbermen. Some farming is also done.

To provide landing facilities to the inhabitants of that part of the St. Lawrence coast, and to supply the total want of shelter for their craft, the department decided to build a wharf.

On October 30, 1906, a contract was entered into for the construction of the proposed wharf, the contract price being $26,900.

The work consists of a stone approach or embankment, 20 feet long; of a shore section 303 feet in length, 20 feet wide, with a mean height of 10 feet, and an outside section, 280 feet long, 30 feet wide at top, with a batter of 1 in 12 on the sides and end.

The depth of water available at the outer end will be 18 feet at low water, spring tides.

The work was commenced in the month of May, 1907, but, owing to bad and stormy weather, the work progressed slowly, and at the close of the last fiscal year, about one-half of the work had been constructed. In the month of October, 1907, an agreement was entered into with the contractor for the construction of the road leading from the highway to the wharf, a distance of 1,100 feet; a part of this road is composed of cribwork, 200 feet long, on a mean height of five feet.

The total expenditure during the last fiscal year was $14,208.95.

STE. EMÉLIE.

Ste. Emélie is a village in the county of Lotbinière ; the post office name is Leclercville. It is situated on the south shore of the St. Lawrence and at the mouth of the Grand Rivière du Chêne, 50 miles above Quebec.

In the spring of last fiscal year, a large quantity of ice, which had piled on the isolated block, had to be removed. The movable trestle roadway and upright long fenders, ordinarily removed in fall, were put in place.

In order to facilitate access to the public wharf, a roadway of dry stone masonry was built; it was covered over with broken stone and gravel and provided with guard railing and slope at its west end.

Total expenditure, $711.50.

ST. FELICIEN.

St. Felicien, a post village in Chicoutimi county, is situated on the Ashuapmouchouan river, fifteen miles from Roberval, the terminus of the Quebec and Lake St. John Railway.

Population about 1,200.

During the year 1895-6, a wharf was built to accommodate the local traffic; it is 70 feet in length, 36 feet in width and 32 feet in height at the outer end, at which vessels drawing 8 feet can lay at low water.

A shed, 20 feet square, was erected on the wharf, at its outer end.

During the year 1899, an addition, 90 feet long, parallel with the channel, and 40 feet wide was constructed at a right angle to the wharf, at its outer end.

During the year 1900, 30 feet in length and 10 feet in height, was damaged by ice, which damage was repaired at a cost of $100.

During the year 1903-4, fifteen boulders obstructing the channel were removed.

Amount expended, $302.94.

Other repairs to the sheathing, the planking and the shed amounted to $640.49.

During the winter of 1904-5, a certain quantity of boulders, obstructing the channel, were removed at a cost of $306.57.

In the fiscal year 1907-8, certain repairs were done to the wharf, the shed was painted, the planking was replaced in some places, the sheathing and the slip were completed.

Amount expended, $377.71.

ST. FRANÇOIS DE SALES.

St. François de Sales is a post village and parish of Quebec, Isle Jésus, Laval county, one mile from Terrebonne.

During spring 1905, materials only were bought for the construction of a high and low level wharf at a cost of $6,947.90.

The construction of the high level portion was begun in August, 1905, and almost completed at the end of June following. The wharf stands downstream and alongside the old Masson pile bridge between St. François and Terrebonne. It is 238 feet long, measured from the public road.

This high level portion is formed of three concrete piers distanced 40 feet clear at top and measuring 40 feet 9 inches by 9 feet 8 inches at bottom, 21 feet by 6 feet at top, (the upstream face used as ice-breaker, being inclined 1½ in 1 and nosed 90 degrees), they are 25½ feet high from low water and resting on close-faced stone-filled cribs, 44 feet by 13 feet, which stand in an average of 3 feet of water. The high level portion also includes a stone and earth approach, 100 feet long, inclusive of concrete abutment inclined in front 1 in 12, also 25½ feet high, 3 feet deep at bottom with two 1-foot retreats of augmenting depth to 5 feet at bottom.

The right of way was given to the Crown by the municipality. Expenditure during 1905-6 was $7,001.23.

During July and August, 1907, the riprapping and gravelling of approach was completed at a cost of $735.24. The iron railing was put on in September and October, but not paid for. The high level portion is thus completed. The outer portion is to be built when the dredging of River Jésus, now being done shall be sufficiently advanced.

ST. FRANÇOIS, I. O.

St. François is situated on the eastern side of the Island of Orleans, 25 miles below Quebec.

On August 11, 1906, a contract was entered into with Mr. A. J. Lemay, for the construction of a part of an approach to the isolated pier built in 1903. This approach consists of a crib, 250 feet in length by a width of 20 feet.

During the fiscal year 1906-7, 78 per cent of the contract work was done. During this present fiscal year 1907-8, the whole of the contract work was completed.

The amount expended is $9,930.77.

ST. FULGENCE.

St. Fulgence, otherwise called 'L'Anse aux Foins,' is a small village in Chicoutimi county on the north shore of the Saguenay river, ten miles below Chicoutimi.

During the fiscal year 1906-7, the wharf, commenced in 1903-4, was continued to a length of 503 feet by 20 feet wide, and 45 feet at outer end, and 24 feet in height; it was built on piers, with a space of 25 feet between each pier.

The piers are provided with fenders, and fully ballasted with stone; two spaces near shore were partly filled with brush and stone, to break the effect of ice.

During the year 1907-8, the work done was the beginning of a pier 20 by 45 at the head of the present wharf.

Expenditure, $1,701.14.

Spring tides rise 17 feet; neaps, 9 feet.

ST. IGNACE DE LOYOLA SOUTH.

St. Ignace de Loyola, a village and parish in Berthier county, situated on the St. Lawrence river, close to the western end of Lake St. Peter, and 2½ miles from Berthierville station on the C.P.R.

St. Ignace de Loyola South is on the St. Lawrence immediately opposite Sorel, 1½ miles south of the parish church of St. Ignace, near which the government has another small wharf.

On November 18, 1907, the Crown entered into a contract with Mr. Eugene Patenaude, of Montreal, for the construction of : A pile head-block, 60 feet long and 40 feet 4 inches wide at top, with ice-breakers inclined 1½ in 1 on upstream side.

A pile approach, 144 feet long and 20 feet wide on top, also with ice-breaker 1½ in 1 on upstream side.

A stone embankment, 84 feet long and 20 feet wide at top, with both sides riprapped and sloped 1½ in 1 and 1 in 1, upstream and downstream respectively; outside face standing 22 feet high in 10 feet of water at lowest level. Contract price, $10,800.

Work was commenced in February last and at the end of March following the structure was about 80 per cent completed.

The expenditure amounted, up to March 31, 1908, to $7,998.84.

ST. IRÉNÉE.

St. Irénée is situated in the county of Charlevoix, on the north shore of the River St. Lawrence, 87 miles below Quebec, some six miles west of Murray Bay.

During the present fiscal year, the movable slip that was damaged by the Canadian Government SS. *Champlain* was repaired at a cost of $267.90.

ST. JEAN DES CHAILLONS.

St. Jean des Chaillons, a post village and parish in Lotbinière county, is situated on the River St. Lawrence, 57 miles above Quebec. Population of village, 1,000.

In order to give convenient communication with wharf, a retaining crib was built at inner end of wharf, a roadway approach connecting same with highway was also constructed.

Expenditure during fiscal year ended March 31, 1908, $13,435.96.

ST. JEAN, I. O.

St. Jean, I.O., is situated on the eastern side of the Island of Orleans, some 18 miles below Quebec.

On August 15, 1906, a contract was entered into with Mr. Nap. Trudel, for the construction of an extension to the wharf. The work consists of a close-faced timber crib, 80 feet long by 50 feet wide. The contract price is $12,280.

During the last summer season, the whole of the construction was completed, at a cost of $13,382.67.

ST. JEAN PORT JOLI.

The village of St. Jean Port Joli, in the county of L'Islet, is situated on the south shore of the St. Lawrence, 60 miles below Quebec.

Spring tides rise 21 feet; neaps, 13 feet.

The wharf, which was vested in the Crown only a few years ago, has now a total length of 504 feet; a depth of 6½ feet water is left at the outer end, at low water spring tides. The wharf consists of a shore part or approach composed of piers connected by platforms, 180 feet long and 18 feet wide; of a middle section, 174 feet in length, open-faced cribwork, and of a head-block, 150 feet long, 38 feet wide, close-faced cribwork.

During the fiscal year ended March 31, 1908, a large quantity of stone, required for repairs to the Lower Traverse pier, was delivered through St. Jean Port Joli, and the wharf was much worn.

The stringers and planking, upon a length of 250 feet by a width of 24 feet, were renewed and 500 feet of cap timbers were also replaced. The spruce sheathing has been repaired and 20 'toises' of stone ballast were added.

The amount expended on these repairs was $949.80.

ST. JEROME.

St. Jerome is a village situated on the southeast shore of Lake St. John, 24 miles east of Roberval.

The wharf, built in the year 1899-1900, consists of an approach, 75 feet in length, 25 feet in width and 15 feet in height, filled with ballast, sand, &c., and of two blocks, 75 feet in length by 25 feet in width, placed 25 feet apart and connected by stringers.

Amount expended, $4,999.28.

During the year 1901-2, an addition, 400 feet long, 25 feet wide and 24 feet high, was built at a cost of $7,933.87.

During the year 1902-3, a block, 60 feet long, 25 feet wide and 27 feet high, was sunk in seven feet of water at low water, 110 feet from the present wharf.

Amount expended, $2,595.20.

During the year 1904-5, two piers were built in the space between the outer block and the wharf, the corbels and stringers, 10 by 12 feet, for the two spans were laid and covered by three-inch deals.

Amount expended, $2,874.37.

During the fiscal year 1907-8, a pier was constructed, 40 feet wide by 20 feet long, of an average height of 10 feet; it was sunk at 18 feet from the outer end of the present wharf.

Amount expended, $1,990.87.

ST. LAURENT, I. O.

This village is situated on the western side of the Island of Orleans, in the county of Montmorency.

During the present fiscal year the widening of the approach to the head-block was started. This work consists of a wooden crib, filled with stone ballast 600 feet long by an average width of 14 feet.

At the close of navigation, two-thirds of this work was completed. The expenditure for the fiscal year 1907-8, amounts to $14,986.16.

ST. LOUIS RIVER.

St. Louis de Gonzague is a post settlement in Beauharnois county, one mile from St. Louis station, on the Ottawa and Swanton branch of the Grand Trunk Railway.

During the spring high water, the River St. Louis spreads over the farming lands from the canal feeder to the village of St. Louis de Gonzague, a distance of about seven miles, and thus causes considerable damage. During the summer, the river often overflows equally after a heavy rain storm, and extensive fields of promising crops have been entirely lost.

Surveys of the river were made in November, 1903, and October, 1904. It was found that, from the village of St. Louis de Gonzague to a distance of two and one-half miles upstream, several little rapids give a total fall of 6 feet. Above the canal feeder the fall is about 1 foot per mile.

By proper deepening of the river bed and straightening of certain curves, the waters should be lowered some 4 feet, which would be amply sufficient to protect the farms along the bank. To obtain this effect, a small dredge was built during the winter of 1903-4 and put in operation in October, 1904.

At the end of June, 1905, a cut had been made through the point known as Simon's, a 28 feet long and 12 feet wide steel span, composed of four 15-inch 24-lb. I-beams with 8-inch channel connections, had been erected in order not to interfere with the roadway, and the necessary dynamiting and dredging done through hardpan and large boulders up to half way through the lower rapid, about 1,000 feet from Simon's mill. The total expenditure in 1904-5, including dredge operating staff but exclusive of cost of dredge, was $6,407.26.

During 1905-6, some 5,000 cubic yards of rock and hard-pan were blasted and removed in the making of a cut, 700 feet long, 40 feet wide and of an average depth of 5 feet. General dredging, including that of blasted materials was done for a length of about 1,500 feet. Expenditure during year was $7,101.74.

The blasting and dredging were continued in July, 1906, and suspended in the following October. Work of reconstruction was also begun in September and completed in the middle of October. The new ⅝-inch steel gates, 4 in number, 8½ feet high and 4 feet wide, rest on a skeleton of concrete mixed 1:3:5: and properly reinforced with 1¼-inch iron bars embedded horizontally and vertically. The doors are lifted, sliding on copper grooves, by 2-inch iron screws turned by a wheel. The top of gates is used as a highway bridge, the flooring being concrete, 22 by 22 feet, and from 18 to 24 inches thick. The retaining walls on both sides are 2 feet thick at bottom, 18 inches at top, with 45 degrees return wings and hand-laid stone backing. The whole structure rests on a 1-foot concrete platform 28 by 24 feet and stands from under said platform to top of flooring, from 14 to 14½ feet high.

The expenditure, for 1906-7, was $7,111.73.

Operations were resumed in May, 1907, and suspended on November 30 following. During that period, rock blasting and dredging were done on a length of 725 feet by a width of 40 feet and to a mean depth of 64 feet. With this material, a protection wall, 1,125 feet long, 30 feet wide and 2½ feet high mean ,was built on both sides of the river. Expenditure during year was $7,205.64.

ST. MARC DE COURNOYER.

St. Marc de Cournoyer is a post village in Verchères county, on the Richelieu river, nine miles from Belœil and fifteen miles from St. Hyacinthe.

In August, 1901, an old wharf, built by the citizens of the locality, and situated about two miles above the village, was transferred to the Crown free of charge, and the construction of a new head-block in front of the old wharf commenced. The new structure consisted of a pile-head block, 87 feet long by a width of 16 feet for the first 63 feet upstream, and a width of 32 feet for the remaining 24 feet, outer face standing 16 feet high in 9 feet of water at low level. Along upstream side, a crib ice-breaker was built, standing 4 feet higher than flooring of head-block. The old wharf, about 100 feet long and 15 feet wide, and which was used as an approach to the new one, was raised 4 feet with stone, gravel and sand, and the sides riprapped

and sloped 1 in 1. Work was carried on by day labour and completed in June, 1902, at a cost of $3,245.67.

In 1902-3, minor repairs cost $99.45.

During 1903-4, a storehouse, 16 by 20 feet, was erected on wharf and the width of stone approach increased 10 feet. Cost, $501.93.

During July and September, 1907, the old pine flooring of head-block was replaced with a 6-inch concrete covering, properly reinforced with Clinton wiring. Expenditure, $834.32.

ST. MATTHIAS.

St. Matthias is a post settlement in Rouville county, three miles from Richelieu.

In 1900-1, the sum of $1,073.55 was expended in the purchase of some timber for proposed wharf.

In 1901-2, the transfer to the Crown of right of way not having been completed, materials only, costing $1,189.88, were bought.

In October, 1902, the site of and right of way to proposed wharf with adjoining plot of land, some 5,200 square feet, to be used as a cattle yard, having been vested in the Crown by the churchwardens for a sum of $500, construction work was immediately commenced and the structure completed in June following. It consists of: A close-faced crib head block, 90 feet long by a width of 20 feet for a length of 60 feet, and 35 feet for the remaining 30 feet.

A stone embankment, 135 feet long, 35 feet wide, with slopes riprapped one in one.

The outer face of head-block is 21 feet high, sunk in 10 feet of water at lowest level. Expenditure, $2,497.26.

In 1904, two storehouses were built, one small and movable, 12 feet square, and the other, permanent, 20 by 21 feet. Cost, $480.31.

During the spring of 1907, the smaller one of those sheds was blown down by the wind and the larger one slightly damaged. The former was rebuilt immediately, and the latter repaired, at a cost of $155.85.

ST. METHODE.

St. Methode wharf is on the River Ticouabé, seven miles from its mouth, opposite the village of St. Methodé, in Chicoutimi county, and 28 miles from Roberval.

During the fiscal year 1907-8, obstructions were removed from the bed of the river.

Amount expended, $291.36.

During the same year, a wharf on piles, 40 feet by 40 feet, was built, with an 'apron' facing the current, having 40 feet along shore; the 'apron' is also built on piles and sheathed.

Amount expended, $940.93.

ST. MICHEL.

St. Michel, in the county of Bellechasse, lies on the south shore of the St. Lawrence, 15 miles below Quebec. The site of the village is picturesque and the place is frequented as a summer resort.

The coasting steamer *Champion* calls twice a day, giving good facilities for the shipment of farm produce.

Spring tides rise 21 feet; neaps, 13 feet.

During the fiscal year ended March 31, 1908, the flooring of the wharf, on a length of 132 feet by a width of 24 feet and 24 feet in length of planking on the slip, were renewed. Three fenders and one mooring-post have been replaced, and general repairs were made to the planking. Some repairs have also been made to the shed; it was painted, together with the mooring-posts and cap timbers of the outer end.

The expenditure amounted to $399.04.

ST. OMER.

St. Omer is a post settlement on the north shore of the Baie des Chaleurs, county of Bonaventure, six miles west of Carleton.

To facilitate the shipment of lumber, a contract was entered into in January, 1908, for the construction of a wharf, 600 feet long, by 22 feet wide, at the price of $12,400.

The amount expended during the last fiscal year is $2,631.82.

ST. PAUL DE JOLIETTE OR D'INDUSTRIE.

St. Paul d'Industrie is a post village in Joliette county, on L'Assomption river, and a station called Crabtree's Mills on the Canadian Northern Quebec Railway, 5 miles from Joliette.

On January 10, 1908, the Crown entered into a contract with Mr. Arthur Pontbriand, of Sorel, for the construction of an ice-breaker in River L'Assomption near the site of the Malo bridge, some four miles southeast of the village of St. Paul. This ice-breaker is to be formed of:—

A pile substructure, composed of 41 spruce or pine piles driven at intervals of from three to four feet up to the level of the bottom of the river.

A concrete superstructure, 40 feet 10 inches long and 11 feet 7 inches wide at bottom, 18 feet long and 6 feet wide at top, with upstream face nosed 90 degrees, covered with a ¼-inch 3 by 25 foot steel plate and inclined one in one from one foot above ordinary low water, all other faces being inclined 1 in 10. The superstructure standing 28 feet high in 7 feet of water at ordinary low water level. Contract price $4,850.

Total expenditure for last fiscal year, $856.23.

ST. SULPICE.

St. Sulpice, a post village in L'Assomption county, is situated on the north shore of the St. Lawrence, 24 miles below Montreal, 5 miles from L'Assomption.

On December 30, 1907, the private wharf, with adjoining plot of land, the property of the Richelieu & Ontario Navigation Company, situated at the foot of the road leading to L'Assomption, and 1½ miles above the village of St. Sulpice, was bought by the Crown for the sum of $2,300. The property is composed of: a crib head-block, 65½ feet long at bottom, 56 feet at top on account of ice-breaker, and 31 feet wide; outside face standing 19 feet high in eight feet of water at low level.

A crib approach, 150 feet long and 20 feet wide.

A plot of land adjoining wharf and extending to public road, of irregular shape, forming an area of 4,575 square feet.

It is the intention to raze the whole structure to low water level and rebuild it up to 12 feet above low water. The head-block will be enlarged on piles, 36 feet along outside face, making the latter 92 feet long and 40 feet deep. The approach will also be rebuilt from low water, a crib ice-breaker built all along and over the crib substructure, and the whole widened on piles 16 feet downstream, so as to have a clear roadway of 23 feet.

Up to March 31, 1908, materials only had been bought at a cost of $4,260.96.

ST. THOMAS DE PIERREVILLE.

St. Thomas de Pierreville is a village on the eastern side of the River St. Francis, 8 miles from its outlet, and 28½ miles northwest of Sorel, the actual terminus of the South Shore Railway.

The sum of $500 was expended during the fiscal year ending March 31, 1908, to repair the riprap and the earth approach leading to the government wharf built in 1904-5.

ST. TIMOTHÉE.

St. Timothée is a prosperous village in Beauharnois county, on the St. Lawrence river. It contains a Roman Catholic church, four stores, three hotels, saw and carding mills and express and telegraph offices. Population of parish, 2,104.

During fiscal year 1882-83, a landing pier was constructed, consisting of a block 100 feet long by 24 feet wide, with seven feet of water along outer face, and a stone, earth and gravel roadway, 257 feet long and 20 feet wide at top. Expenditure $1,841.46.

On account of damage by ice done during the spring of 1884, repairs cost$187.21.

During the summer of 1899, the head-block was enlarged outward 44 by 100 feet, by the construction of three small cribs, each 25 by 20 feet, some twenty feet from each other and with outside face 44 feet from face of old block, all intervening spaces being spanned with timber stringers. Cost, $3,773.15.

During fiscal year 1899-1900, a number of stringers and the flooring were renewed; the storehouse and waiting-room were repaired and painted; a cattle yard, 60 by 15 feet, at the inner angle of the wharf, alongside the roadway, was made with stone and earth and properly fenced, and the roadway was improved. Expenditure, $801.45.

In February, 1907, the three cribs, constructed in 1889, were razed from low water level and rebuilt three feet; the span between these cribs and the old block was entirely filled in with stone, and minor repairs made at a cost of $1,589.39.

During July and November, 1907, repairs, costing $242.18 were made to the flooring of freight shed and to the stone approach.

ST. VALIER.

The village of St. Valier, in the county of Bellechasse, is situated on the south shore of the St. Lawrence, 21 miles below Quebec. Spring tides rise 21 feet; neap tides, 13 feet.

With a view to facilitate the transportation of farm produce by allowing the coasting steamer *Champion* to call, it was decided to build a wharf at St. Valier.

On February 6, 1907, a contract was entered into for the construction of the proposed work; the contract price being $10,995.

It consists of a stone approach, 27·5 feet long, and of a timber cribwork, filled in with stone ballast, 275·5 feet in length, with a batter of 1 to 12 on the sides and outer end; it is 22 feet wide and 21 feet high. The work, commenced in the month of June, was completed by the end of October. As it stands now, the outer end of the wharf is still dry at low tides, but the construction of a few hundred feet extension would permit the steamer *Champion* to call there at any stage of the tides.

Total expenditure during last fiscal year, $11,343.

SAULT-AU-MOUTON.

Sault-au-Mouton is situated on the north shore of River St. Lawrence, 3 miles from Mille-Vaches village.

The River Sault-au-Mouton forms a channel which is navigable at high water; it is the only channel where the people load vessels.

During the fiscal year 1907-8, the work done was the removing of some of the boulders which rendered navigation very dangerous.

Expenditure, $1,035.42.

SOREL—(DEEP WATER WHARF).

Sorel, an incorporated town, is situated on the Richelieu river, at its confluence into Lake St. Pierre. It is distant 45 miles from Montreal by rail. Population, about 7,000.

In June, 1901, a contract was entered into with Messrs. McAuliff, Poupore, Malone & Weddell, for the construction of a deep water wharf. The contract price was $255,632.43.

Work was commenced at once in 1901-2, and completed in the month of April, 1905.

On November 13, 1905, an accident occurred to the said wharf, in which 256 feet of the structure was destroyed, owing to the nature of the subsoil.

In March, 1906, some temporary repairs were made at the south end of the remaining porion of the pile wharf, so as to prevent undermining by the current.

In May, 1906, the dredge *International* was put to work, and the debris of the wrecked portion removed.

In the summer of 1907, a contract was entered into with Messrs, Beauchemin et Fils, of Sorel, for the construction of an additional front of cribwork to the deep water wharf.

The work under contract consists: in building a line of cribs extending from the beginning of the new wharf, adjoining the Richelieu and Ontario Navigation Company's wharf, to the northwest angle of said new wharf outside of the structure as at present existing; of dredging and preparing stone foundation for same ; of placing about 1,100 cubic yards of stone to form a stone slope reventment at the northeast end of the present structure, and all necessary filling.

During the last fiscal year the sum of $54,081.29 was expended, including $18,763 paid to Messrs. McAuliff, Poupore, Malone & Weddell for extra dredging done in connection with their contract.

SQUATECK.

Some eighteen miles east of Lake Témiscouata, in the county of Témiscouata, is situated Squateck settlement, which, although quite new, will soon be the centre of a flourishing agricultural district.

The only means of transportation for the community is via Cabano and through Lake Témiscouata.

In order to provide some accommodations and to give landing facilities to the inhabitants of this isolated place, the construction of a landing pier was commenced on the east side of the lake, opposite Cabano.

The work, which is not completed yet, is now 100 feet long, 24 feet wide on a mean height of 10 feet.

Expenditure for the fiscal year, $941.96.

TERREBONNE.

Terrebonne is a town in Terrebonne county, on the River Jésus, twenty-four miles north of Montreal.

In June, 1905, materials costing $6,946.44 were bought for the building of a high and low level wharf at this place.

Work on the high wharf was commenced in August, 1905, and almost completed in June following. It stands downstream and alongside the old Masson bridge, the right-of-way having been given to the Crown by the municipality.

The high level portion is formed:—

(*a*) Of three concrete piers, distanced 40 feet clear at top and measuring 40 feet 9 inches by 9 feet 8 inches at bottom, 21 by 6 feet at top (the up-stream face, used as ice-breaker, being inclined 1½ in 1 and nosed 90 degrees), 25½ feet high from low water and resting on close-faced stone-filled cribs, 44 feet by 13 feet. The piers are spanned by a steel structure;

(*b*) Of a stone and earth approach, 91 feet long, inclusive of concrete abutment inclined in front 1 in 12, also 25½ feet high, 3 feet deep at top with two 1-foot retreats at back and 45 degree return wing on upstream side.

Expenditure during 1905-6 was $6,995.54.

During September and October, 1907, the riprapping and gravelling of approach was completed, at a total expenditure of $597.05.

The low level portion will not be commenced until the dredging of River Jésus, now being done, shall be sufficiently advanced.

THREE RIVERS.

The city of Three Rivers is situated on the northern bank of the River St. Lawrence, at the mouth of the River St. Maurice, seventy-four miles below Montreal and sixty-eight miles above Quebec. Population, 12,200.

In June, 1902, a contract was entered into with Mr. Randolph MacDonald, for the construcion of a deep waer wharf with a mooring face of 1,968 feet on the river side, and a return of 24 feet to connect the lower end of Dean's wharf. The contract includes the construction of an ice-breaker, 50 by 100 feet and 53 feet high, or 23 feet above low water.

The concrete work was completed on November 9, 1906.

The 100-foot embankment was completed June 30, 1907.

The material supplied to fill the gap between the 100-foot embankment and the loop line, the property of the Canadian Pacific Railway Company, was discontinued at the end of the month of July, 1907.

The expenditure for the fiscal year ending March 31, 1908, amounts to $96,729.27.

TICOUABÉ.

Ticouabé, in Chicoutimi county, is situated at the outlet of the river of the same name, twenty-one miles from Roberval.

A small landing was built at this place during the year 1897-8, to accommodate the local trade and to help its development. The wharf consists of a solid block of close-faced cribwork, 30 by 30 feet, built at a short distance from the shore, and connected to it by a platform supported on trestles, 103 feet long, and 25 wide; a combined freight and shelter shed, 25 feet by 30 feet, was also built.

Amount expended, $1,611.79.

During the year 1903-4, the trestles were renewed and the space between the trestles and corbels were put on to support the floor stringers.

The outer pier of the wharf was levelled and the head was surrounded with pile-work.

Amount expended, $792.08.

The work done during the fiscal year 1907-8, was the renewing of the planking and general repairs.

Total amount expended at Ticouabé, $1,230.83.

TROIS PISTOLES.

Trois Pistoles, in the county of Témiscouata, is an important village on the Intercolonial Railway, twenty-five miles below Rivière du Loup. The land in the vicinity is fertile and the place is flourishing. It is somewhat frequented as a summer resort. Along the River Trois Pistoles, stand large saw and pulp mills.

Spring tides rise 18 feet; neaps, 10 feet.

During the year 1907-8, the following works were performed on the outer end of the wharf; the planking, stringers, and first row of cross-ties were renewed upon a length of 150 feet, by a width of 30 feet, cedar being used for the work; the hardwood sheathing of the outer end corners was repaired; some face-timbers, which had been broken by ice, were replaced; 34,000 feet B.M. of spruce, 5 inches thick, have been used to sheathe the face-timbers in both sides of the outside

part of the wharf, and some 250 feet of cap pieces were also renewed. In the month of November last, an unusual high tide swept part of the earth approach to the wharf; the sum of $145.75 was expended to repair the damage.

In order to improve the harbour in widening the entrance of the river, some work was performed to blast and remove part of the rock standing between the wharf and the breakwater; about 1,800 cubic yards of stone were broken and taken away.

The amount expended on these works during the fiscal year was $5,145.72.

VARENNES.

Varennes is a parish and post village in Vercheres county, on the St. Lawrence river. Population, 2,342.

During March, 1908, the department entered into negotiation with the Richelieu and Ontario Navigation Company, for the purpose of acquiring their wharf at Varennes; theirs being found the best location available. The sum of $4,000 was offered to the company for their property and accepted, but the transfer had not been completed on March 31.

The old wharf proper has an outside face length of 60 feet, including ice-breaker, and a depth also of 60 feet. The adjoining plot of land extending to and along public road, and included with the purchase of wharf, is of irregular shape and forms an area of 17,365 square feet.

It is intended to raze the old structure to lowest water level, rebuild close-faced cribwork and enlarge it on piles, 60 feet along outside face and 64 feet inshore.

Up to March 31, materials only have been bought at an expenditure of $3,367.98.

WEEDON.

Weedon Station, a post village and parish in Wolfe county, is situated on the St. Francis and Salmon rivers. Population, 2,400.

On February 20, 1908, a contract was entered into between the Crown and Mr. Adolphe Tanguay, of Weedon, for the construction of protection works, near the western bank of the St. Francis river, which each spring overflowed and caused damages to the adjoining properties. These protection works consisted in a two-branch stone embankment, one 1,000 feet long along Gould's Road, starting 100 feet west of Ferry's Road, and extending 100 feet east of it, and the other, 200 feet long, along Ferry's Road, extending 200 feet north of Gould's Road. The embankment has a width of 13 feet on top, with sides riprapped and sloped one in one and on a height varying from six inches on the extremities to four feet at the intersection of the two roads. Contract price, $1,925. Work was commenced and completed in March last.

WOBURN OR LOURDES.

Woburn is a post village in Beauce county, on the Arnold river, 18 miles from Megantic station on the C.P.R.

The public wharf, built with four others on Lake Megantic between 1882 and 1887, is situated about five miles north of the village, on the western shore of the lake, in Compton county.

It consisted of a cribhead block, 20 by 30 feet, with crib approach, 170 by 16 feet; original cost, $1,194.71.

During September, 1907, the wharf, having been damaged by ice in April preceding, was repaired by day labour. Three upper tiers of outside half of head block were renewed, screw-bolted, vertical posts inserted at all corners; an eight-inch sheathing placed all along the front face and sides, and the shed strengthened. Total cost, $385.55.

PROVINCE OF ONTARIO.

AMHERSTBURG.

The town of Amherstburg, in the county of Essex, is situated on the east bank of the Detroit river, about five miles from Lake Erie and fifteen miles south of Windsor, to which place it is connected by electric car service. The Michigan Central Railway also runs into Amherstburg. Population about 2,500. It is one of the oldest settlements in Ontario.

On November 8, 1907, authority was received to expend the sum of $1,000 in the construction of stone breastwork for the protection of the eroded portions of the shore line on the Detroit river and fronting on the township of Malden. Such expenditure was authorized after the township of Malden had consented to co-operate with this department in this work by expending a similar amount, *i.e.*, $1,000.

Arrangements were made with Mr. E. E. Harris, of Amherstburg, for the supplying and placing in position, in manner as directed, the required stone, at the rate of $9 per scow load.

Operations were commenced on November 13 and were continued until November 30, 1907, when work closed down until the reopening of navigation, and during which time some 280 feet of the shore line was protected.

An arrangement was also made with the United States government that, on cleaning up with derrick scows that portion of new channel on the Hacket range opposite Malden front, they would deposit the boulders from their derrick scows, as close to shore as possible, to assist in the protection of this shore line.

Total expenditure from April 1, 1907, to March 31, 1908, $403.40.

BAYFIELD.

Bayfield is a village in the county of Huron, situated on the easterly shore of Lake Huron, at the mouth of Bayfield river, twelve miles south of the town of Goderich.

On May 14, 1907, authority was received to expend the sum of $450 by day labour in repairs to piers. Work was started on May 23, and completed on August 29, 1907; it consisted in the filling of the inner half of 300 feet of the north pier with gravel and stone; the recovering of the outer end of this pier, and general repairs to south pier.

Total expenditure from April 1, 1907, to March 31, 1908, $499.90.

BEAVERTON.

Beaverton is situated in the county of Ontario, on the easterly shore of Lake Simcoe, about 60 miles northeast of Toronto. Population, 2,500.

At the last session of parliament, the sum of $3,500 was appropriated for harbour improvements, and on May 14 last, authority was given to proceed with the work by day labour; on August 30 last, a further sum of $1,000 was appropriated for dredging.

On May 25, 1906, an agreement was made with Messrs. Brown & Aylmer, of Camebridge, to perform the dredging required at 25c. per cubic yard, scow or place measurement.

Work was begun on May 23 and completed November 1; it consisted in dredging a channel 830 feet long with a minimum width of 60 feet and a depth of 8 feet, also a turning basin 360 feet long having a minimum width of 60 feet and a maximum width of 180 feet, and in doing this work some 10,431 cubic yards of clay, sand and gravel were removed.

Work was begun on the sheet-piling on September 16 and completed December 28 last, and consisted in driving a row of close sheet-piling 160 feet in length on the north side of the river and 136 feet on the south side.

Total expenditure in 1907-8: for dredging, $5,998.75; for piling, $1,533.

BLACK RIVER.

Black River flows through the township of Mara, discharges into the Severn river and drains a considerable area of said township.

At the last session of parliament, the sum of $700 was appropriated for the removal of obstructions in this river, and, on May 14 last, authority was given to proceed with the work by day labour.

Work was commenced on November 20 and completed December 31 last ; it consisted in the blasting and removing of a rocky point at McDougall's Falls, averaging in dimensions 16 feet deep by 60 feet in length by 30 feet in width.

Total expenditure for fiscal year 1907-8, $700.

BLANCHE RIVER.

The Blanche empties into Lake Temiskaming just west of the Quebec boundary. This stream navigable for 26 miles to Tomstown, has now a considerable traffic.

On account of landslides, the bed of the river is obstructed by snags. Work of removing these, started in 1905, was continued in 1907-8.

The river was swept twice throughout its length, and is now free from dangerous obstructions. A new outlet, Caribou channel, was cleaned and made available for steamboats. The river near Tomstown was cleared of all snags, which lay particularly heavy at this point, and twelve piles were removed from the falsework of a bridge. (For further particulars, see report for fiscal year 1906-7.)

With a view of building, in 1890, a shallow water dredge from one of the spoil scows, for the purpose of removing gravel bar near the head of navigation, machinery and timber were bought at a cost of $1,082.79.

Other details of further expenditures allied with Blanch river operations, to be found in current year's report, under Haileybury and Lake Temiskaming, generally.

Expenditure during the fiscal year 1907-8, $7,839.54.

BLANCHE RIVER (SOUTH BRANCH).

The south branch of Blanche river flows southeasterly parallel to and about 11 miles northeast of the Montreal river, both of which find their way into Lake Temiskaming after draining the large watershed, through the northwest quarter of Nipissing district.

The improvements required consist chiefly in cutting overhanging and uprooted trees in the narrows and river sections where the width, bank to bank, varies from 75 to 150 feet, making it difficult for boats to render good service.

At its last session, parliament granted $5,000 towards improving this watercourse. Accordingly, a plant consisting of floating cook-house, sleeping-quarters, covered team ferry, pointers, tools, &c., was built and later improved at a cost of about $1,400. Operations commenced July 25 and were discontinued October 15. The lower reach of the river and the narrows were thoroughly improved. Some 250 dead-heads and over 5,000 logs (cut from overhanging trees) were removed and piled, at intervals along the shore, at a cost of $2.40 each for the former, and 60 cents each for the latter. Work progressed at the rate of three miles of stream, cleaned per month.

The plant was wintered at Charlton, where it was overhauled and improved for the work required in 1908.

Expenditure during the fiscal year 1907-8, $4,525.54.

BLIND RIVER.

Blind River is a village situated on the north channel, Lake Huron, in the district of Algoma, and is a station on the Canadiaan Pacific Railway. Extensive lumbering operations are carried on at this place.

At the last session of parliament, the sum of $6,000 was appropriated for improvements, and on May 27 last, authority was given to expend $3,400 for an extension to the wharf and $1,500 for an addition to the warehouse, the work to be performed by day labour.

Work was commenced on the extension to wharf on July 29, completed February 29, and consisted in the extension of the 'L' westerly, 100 feet long by 30 feet wide.

Work, begun on the addition to the warehouse on July 13 and completed October 12, consisted in building an addition 38½ feet wide by 70 feet long.

As the amount authorized was not sufficient to complete the addition to warehouse, a further sum of $500 was authorized on September 30 last.

On May 21 last, authority was given to perform certain dredging at this place for which a contract was awarded on July 12 last to the C. S. Boone Co., of Toronto, at the following prices per cubic yard, scow measurement: rock, $4; all other materials, 18½ cents.

Dredging commenced on July 13 and was completed October 26, for the season; it consisted in widening and deepening channel to the government wharf, increasing the minimum width from 100 feet to 150 feet and the maximum width to 215 feet, also constructing a turning basin in front of the government wharf, 280 feet in width.

Total expenditure for fiscal year 1907-8:—

Improvements to wharf	$ 5,489 01
Dredging	15,535 82

BURLINGTON CHANNEL.

Burlington channel, in the county of Wentworth, is simply a cut through a piece of low land which partially separates Lake Ontario from a large sheet of water called Burlington bay, thereby enabling vessels to reach the wharfs at the city of Hamilton. Over this cut a swing bridge is erected.

On December 18 last, authority was given to expend the sum of $725 for re-planking the bridge by day labour.

Work commenced on March 9 and completed March 31, consisted in re-planking the entire bridge which is 262.3 feet long and 20 feet wide.

On October 9 last, authority was given to expend the sum of $500 for temporary repairs to the south pier of the channel.

The work was done between October 29 and completed November 14, and consisted in the placing of large stones along the south side of the pier for a length of about 150 feet and placing some at the outer end of the lighthouse pier.

On August 3, 1906, authority was given to prepare contract plans and specifications for the construction of a head-block at the easterly end of the south pier, 40 feet by 38 feet, having cribwork substructure with concrete superstructure.

A contract was awarded for same to Mr. Joseph Battle, of Thorold, to perform the work for the sum of $9,496.20.

Up to date there had been no expenditure.

On May 30 last, authority was given to expend the sum of $750 for the construction of a landing place, for small boats, in the angle formed by the south pier of the channel and the lighthouse head-block, at the westerly end thereof.

Work was commenced on July 15, completed July 24, and consisted in the building of a pile wharf 10 feet wide by 80 feet long, also an opening was made through the south pier near the Royal Hamilton Yacht Club, to carry off the refuse that accumulated there.

On April 30 last, authority was given to expend the sum of $500 in repairing the masonry of the swing bridge at this place.

Four inches of the face of stone were removed from the northerly abutment, in order that the bridge might swing more freely; a concrete buffer pier for the bridge

to close against was also constructed; the concrete abutment is 16 feet long by 3 feet wide and 10 feet high.

Total expenditure for fiscal year 1907-8, $675.52.

CALLENDAR.

Callendar, a town of some 1,000 inhabitants, is situated on the west shore of Lake Nipissing, on the North Bay branch of the Grand Trunk Railway, nine miles south of North Bay. Lumbering and general business are the chief industries.

At the last session of parliament, the sum of $800 was appropriated for an extension to the wharf at this place.

Work was done by day labour between July 4 and August 14, and consisted in the construction of a crib and space structure, at the outer end, 33 feet by 20 feet, and, at the inner end, 47 feet by 20 feet, also the completion of the stone approach, 60 feet long by 16 feet in width on top.

Total expenditure for fiscal year 1907-8, $809.61.

COBOURG.

Cobourg is a large town on the north shore of Lake Ontario, in the county of Northumberland, on the main line of the Grand Trunk Railway, 66 miles east of Toronto.

At the last session of parliament, the sum of $67,500 was appropriated for harbour improvements at this place, of which the sum of $4,000 was appropriated on July 22, last for repairs to piers.

Work was begun on April 24, and completed September 18; it consisted in rebuilding, from the water up, the easterly end of the north esplanade, about 405 feet long by 23 feet wide.

On May 21 last, authority was given to perform certain dredging; a contract was awarded to Mr. W. E. Phin, of Welland, on July 5 last, at the following prices per cubic yard, scow measurement; rock, $2.50; all other materials, 11 cents.

This work was commenced on June 7, and closed for the season on November 14, during which time the dredge removed 188,279 cubic yards of clay and sand, and excavated a channel approaching the harbour, 1,020 feet long by 120 feet wide; also, in the outer harbour, an area 600 feet long by a minimum width of 125 feet and a maximum width of 340 feet, and in the inner harbour, an area 530 feet long having a minimum width of 160 feet and a maximum width of 380 feet.

Total expenditure for fiscal year, 1907-8:—

Construction and improvements	$ 4,299 46
Dredging	21,290 88

COLBORNE.

Colborne is situated on the north shore of Lake Ontario, distant 14 miles east from Cobourg. Population, 1,000.

Authority was given on October 20, 1905, to prepare contract plans and specifications for the construction of a wharf at this place.

These were duly prepared and on November 8 last, a contract was awarded to Messrs. Kastner and Porter, of Wiarton, to perform the work for the sum of $12,990.

Work was begun on November 26, and is still in progress, and consists in the construction of a wharf of cribs and spaces, 288 feet long by 20 feet wide, with a stone approach connecting same with the shore, 250 feet long by 16 feet wide on top.

The original site of wharf has been changed and it is being built at the foot of the public highway thereby increasing the length of the stone approach by 100 feet.

Total expenditure for fiscal year 1907-8, $368.11.

COLCHESTER.

Colchester is a village situated on the north shore of Lake Erie, in the county of Essex, about four miles south of Harrow, and about fourteen miles from the Detroit river. Harrow is the nearest point with railway connection. Population, about 200.

The sum of $503.32 having been voted for expenditure, work was commenced on August 2, and continued until November 23, 1907, when the wharf was completed.

The work performed, consisted in the construction of the superstructure of outer block, 28 feet by 12 feet, consisting of concrete walls and stone filling; the placing of a small amount of additional filling in the remainder of the wharf, as also additional stone to approach.

Some slight scouring has occurred at outer end of the structure, and, in consequence, this portion of the work has settled slightly. When final settlement has taken place, however, the concrete superstructure can easily be re-levelled and raised to the necessary height.

Total expenditure from April 1, 1907, to March 31, 1908, $503.11.

CUMBERLAND.

Cumberland village, in the county of Russell, is located 20 miles below Ottawa and two miles south of Buckingham Junction, on the C.P.R. Besides the regular ferry service, the public wharf, built in 1905, provides for considerable traffic from passenger and freight boats plying on the River Ottawa.

(For details of construction, see report for fiscal year 1906-7).

In 1907, minor repairs were made to the freight shed, slip and fenders; a two-line wooden hand-railing, 178 feet long, was erected; the roadway to the wharf was graded to a 14 per cent rise, 180 feet in length, by rock cutting, and the low lever approaches were raised at a cost of $346.43.

FRENCH RIVER.

French River flows through the district of Nipissing from Lake Nipissing to the Georgian Bay. Where it leaves Lake Nipissing there are five branches.

At the last session of parliament, the sum of $18,000 was appropriated for the construction of two wooden dams on the main outlet of the French river near Lake Nipissing for the purpose of maintaining the level of Lake Nipissing at a uniform height as an aid to navigation; on March 12 last, authority was given to proceed with the work by day labour.

Work was commenced on July 25, completed January 18, and consisted in the construction of two wooden dams near the Little and Big Chaudière Falls, one, some 90 feet long and the other, about 75 feet long.

Total expenditure for fiscal year 1907-8, $12,098.43.

GODERICH.

Goderich is the county town of the county of Huron, situated on the east shore of Lake Huron, at the mouth of the Maitland river, about sixty-eight miles from Sarnia, and sixty-three miles from London. It is the terminus of the Buffalo and Goderich branch of the Grand Trunk Railway, and of the Guelph and Goderich branch of the Canadian Pacific Railway. Population is about 5,500

Located on the harbour front, is one of the largest flour mills in Canada, capacity being 1,200 brls. per day.

In 1906, the construction of the new elevator at this point was completed. It is of the most modern type, being constructed of reinforced concrete, with capacity of one-half million bushels. During the season of navigation of 1907, some 3,350,000 bushels of wheat were handled by this elevator, while in addition, some 1,331,000 bushels were unloaded and used by the mill.

The construction of the new terminal station and yard was completed during the past year by the Canadian Pacific Railway.

The surrounding country is rich in farm products. It is also a favorite summer resort, and is a port-of-call for three lines of steamers; while the boats carrying grain to the elevator and mill, are of the deep draught type, and bring their cargoes principally from Fort William.

It is of importance as a harbour of refuge, being practically the only harbour available for deep draught vessels, on the easterly shore of Lake Huron.

At the last session of parliament the sum of $113,000 was appropriated for harbour improvements.

Dredging.—On May 10, 1907, authority was received to proceed with dredging, contract having been let for same to Mr. W. L. Horton, of Goderich, at the price of twenty-five cents per cubic yard, scow measurement, for all materials other than rock, and $4 per cubic yard, scow measurement, for rock.

Dredging was commenced on May 14 and continued until June 14, 1907, when work ceased temporarily; it was again resumed on July 25 following and continued until November 30, 1907, when work closed down for the season.

Some 37,056¾ cubic yards of sand and gravel and 4,537¼ cubic yards of rock, were removed from the inner harbour; from the channel between piers, and from outer entrance to harbour.

Repairs to Piers, etc.

On May 14, 1907, authority was received to expend, by day labour, the sum of $9,500 in repairs to piers and erection of lights on breakwater.

Repairs were commenced on August 1, 1907, and were completed on March 26,1908; they consisted in levelling up 424 feet of north pier and renewing decking to same; in raising 100 feet of the extreme outer end of this pier which had settled about three feet, and in partially renewing the decking of same.

Two old cribs, situated about the middle and on north side of north pier, were stripped to low-water level, and timber from same utilized in sheeting an adjoining gap, 60 feet long between substructure and superstructure of this pier.

On south pier, 90 feet of top timbers in superstructure on south side, were renewed. A breach, 14 feet long in bottom and 28 feet on top and 7 feet high, was renewed, at outer end of and north side of this pier, with necessary cross-ties and stone-filling for same. Four snubbing posts were renewed and other minor general repairs made.

In May, 1907, 2 lamp-posts were erected by this department on the submerged breakwater, one at either end of the structure, and lights were maintained on some throughout the season.

Breakwater.—On January 23, 1908, a contract was entered into with Mr. Wm. Bermingham, of Kingston, for the completion of the 500 feet of breakwater, which was partly constructed, when severely damaged by big storms on and subsequent to October 19, 1905. The contract price is $94,700.

On March 31, 1908, work of construction had not yet been commenced.

Total expenditure, from April 1, 1907, to March 31, 1908, including dredging, repairs, &c., $33,728.66.

GORE'S LANDING.

Gore's Landing is a small village of some 100 inhabitants, situated in the county of Northumberland, on the south shore of Rice lake, twelve miles north from Cobourg.

At the last session of parliament, the sum of $1,000 was appropriated for the completion of the wharf and, on May 14 last, authority was given to proceed with the work by day labour.

Work was commenced on June 19 and closed for the season on December 8; it consisted in placing stone-filling in the pier.

Total expenditure for fiscal year 1907-8, $379.55.

GRAND RIVER BRIDGE.

Grand River bridge is a highway bridge connecting the east and west banks of the Grand river, at the village of York, in the county of Haldimand, and is five miles from Caledonia, the nearest railway station.

Authority was received to expend by day labour the sum of $1,675 in repairs required to this bridge.

Work was commenced on October 1, 1907, completed on January 30, 1908, and consisted in the placing of two rows of 6 by 12-inch pine stringers, on the 165 feet of timber trestle approach to bridge; the removal of a large amount of filling to earth approach; the placing of a rubble stone riprap to protect earth embankment from erosion; the renewal of a portion of flooring on trestle approach and on spans; as also the placing of 40 iron knee braces, 5 on inside of each truss, for the purpose of strengthening upper chord which had shown decided tendency to buckle.

Total expenditure from April 1, 1907, to March 31, 1908, $1,644.76.

GRAND BEND.

Grand Bend is a village situated on the easterly shore of Lake Huron, at the mouth of the Sauble river, about thirteen miles from Parkhill; Parkhill being the nearest railway station. It is fifteen miles from Exeter and about thirty miles south of Goderich.

On May 14, 1907, authority was received to expend, by day labour, the sum of $550 on the reconstruction of approach, 100 feet long, to the breakwater pier.

Operations were commenced on June 19, 1907; considerable difficulty was experienced in the progress of the work; during October the portion of the work, which had been already done since June 19, was completely demolished by the overflowing of the river.

It being evident that, until the bar at mouth of river is properly opened up, further washouts would be likely to occur on the sites of the approach, all damaged material was collected and stored in a safe place, and further operations on the site of the work ceased on October 31, 1907, until further orders.

Some slight repairs were made to the decking of the pier and a portion of the stone-filling in pier, which had settled, was renewed.

Total expenditure from April 1, 1907, to March 31, 1908, $344.84.

GRIFFITH'S ISLAND.

Griffith's Island is the largest of three islands lying in the Georgian bay at the entrance to Colpoy's bay and Owen Sound. It has an area of about 3,000 acres, of which a considerable portion is arable. There is a sawmill on the island near the site of the wharf. The island is fairly well timbered and has a population of 100.

At the last session of parliament, the sum of $1,000 was appropriated for the construction of a wharf and, on May 14 last, authority was given to proceed with the work by day labour.

The work, commenced on July 18, was completed September 1, and consisted in building a block of cribwork, 24 feet wide by 40 feet long.

Total expenditure for fiscal year 1907-8, $949.27.

HAILEYBURY.

The town of Haileybury, on the west shore of Lake Temiskaming, is the chief port on the route of the Toronto & Northern Ontario Railway, 108 miles from North

Bay. Naturally it links rail and water traffic, navigation extends over a distance of 150 miles. It is 5 miles from Cobalt, the heart of an important mineral district.

The construction of a wharf was commenced in 1900-1, and proceeded with during irregular intervals until the completion in 1907, at a total cost of $24,269.56. (Particulars of construction in report for fiscal year 1906-7).

In June-July, 1907, a three-line wrought iron pipe railing was erected in a concrete cap-piece along the south side of the wharf approach (516 feet long), similar to that previously erected along the north side, and the wharf was regraded at a cost of $526.23 chargeable to Harbours, Ontario.

In October, 1907, the wharf approach being in bad condition, from the heavy traffic, rainy season and consequent poor drainage, was improved by the addition of vertical drain pipes and wrought iron covers, at a cost of about $50. The painting of the hand-railing on both sides of the approach was also done.

Expenditure during the fiscal year 1907-8, $722.45.

HAMILTON.

Hamilton, a city in the county of Wentworth, is situated on the south shore of Burlington bay, at the western extremity of Lake Ontario. Population, 65,000.

On April 20, 1906, a contract was awarded to Mr. A. A. McDonald, of Hamilton, to construct a revetment wall of pile-work with stone substructure and concrete superstructure having an interlocking steel pile facing, 1,230 feet in length by 10 feet in width on top, for the sum of $71,000.

Work was commenced on June 27, 1906, and completed November 18 last.

On May 21 last, authority was given to do certain dredging, for which a contract was awarded on July 5 last to Mr. W. E. Phin, of Welland, at the following prices per cubic yard: scow measurement, rock, $2; all other materials, 12c.

The dredging commenced on September 3 and closed for the season on November 30, during which time the dredge removed 52,778 cubic yards of clay and sand; deepened and widened approaches to the Hamilton Steamboat Company's wharfs, MacKay's wharfs, and at other points where required and where large vessels call.

Total expenditure for fiscal year 1907-8: construction and improvements, $41,757.39; dredging, $6,588.96.

HOLLAND RIVER.

On September 22, 1905, lot No. 20 and a wharf were purchased from John Rogers and wife for the sum of $500; other expenses during that fiscal year were $73.30.

Previous to the transfer the wharf had been repaired by the department at a cost of about $500.

JEANNETTE'S CREEK.

This wharf is located on the south bank of the River Thames, opposite Jeannette's creek, in the county of Kent, about 14 miles from the city of Chatham, and about four miles from the mouth of the River Thames.

It was constructed for the purpose of serving the surrounding prosperous farming district, to enable them to ship their produce by water, and to bring in coal, lumber and other materials.

On August 9, 1907, authority was received to do necessary dredging in front of and on approaches to dock, the work to be performed by the Chatham Dredging and General Contracting Company, of Chatham, at the rate of 20 cents per cubic yard, scow measurement.

Operations were commenced and completed between August 19 and 22, 1907, and consisted in dredging to a depth of 12 feet below L. W. L., the area in front of and approaching dock, over which a less depth than 12 feet existed; in the performance of same, 1,214 cubic yards of clay were removed

At the last session of parliament, the sum of $1,800 was appropriated for the completion of wharf at mouth of river, and on May 14, authority was given to proceed with the work by day labour.

Operations were commenced on June 1, and continued until September 30, 1907, when grant was expended. Work performed consisted of the construction of 220 feet of concrete wall 5 feet 3 inches in height, with an average thickness of 3 feet 6 inches; the construction of 70 feet of sheet pile protection work, at lower end of dock, to provide protection against wave erosion; the supplying and placing of about 2,000 cubic yards of filling in rear of concrete wall and construction of five mooring piles.

Total expenditure from April 1, 1907, to March 31, 1908, $1,799.82.

KEARNEY.

Kearney is a village situated on the Magnetawan river, in the district of Parry Sound, some seven miles from Scotia Junction on the Grand Trunk Railway from Toronto to North Bay. Population, 550. It is quite a lumbering and manufacturing centre.

At the last session of parliament, the sum of $800 was appropriated for the construction of a wharf, and on May 14 last, authority was given to proceed with the work by day labour.

The work, which was completed on September 10, consists in the construction of a cribwork wharf, 136 feet in length, filled in with earth, and the grading of an approach in the rear thereof.

Total expenditure for fiscal year 1907-8, $756.61.

KINCARDINE.

Kincardine is a prosperous town situated on the east shore of Lake Huron, in the county of Bruce, thirty-nine miles south of Southampton and thirty-two miles north of Goderich. It is the terminus of the Wellington, Grey and Bruce division of the Grand Trunk Railway. Population, about 3,000.

At the last session of parliament, the sum of $4,500 was appropriated for repairs to piers and dredging, and on May 14, 1907, authority was received to expend this grant.

Work on repairs to piers, by day labour, was commenced on June 3,, and on November 29, 1907, work ceased for the winter, some 275 feet of sheet piling, which had become undermined, was removed and almost entirely used in levelling up some 275 feet of north pier. The outer end of south pier was redecked, while the cribwork of this pier was also repaired in different places and some new stringers provided.

On June 3, 1907, authority was received to proceed with the dredging, a contract having been awarded to Mr. W. L. Horton, of Goderich, at 25 cents per cubic yard, scow measurement. Work was commenced on June 18, and was completed on July 2, 1907, during which time some 8,000 cubic yards sand and gravel were removed, in excavating a channel, 100 feet wide and to a depth of 18 feet below L.W.L. at entrance to piers; 50 feet wide with an average depth of 15 feet below L.W.L. between piers, and 25 feet wide to a depth of 14 feet on southerly side of inner harbour.

Total expenditure from April 1, 1907, to March 31, 1908, including dredging, repairs, &c., $3,725.54.

KINGSVILLE.

Kingsville is situated on the north shore of Lake Erie, in the county of Essex, about 25 miles east of the mouth of the Detroit river, and on the line of the Pere Marquette Railway. Population about 1,600.

On May 14, 1907, authority was received to expend, by day labour, the sum of $400 in repairing easterly breakwater pier.

Work was commenced on March 2, and completed on the 14th of same month, and consisted of general repairs to the decking of easterly pier, as also the renewal of 127 feet of waling on inner face of said pier.

Expenditure during fiscal year, $392.83.

LANCASTER.

Lancaster is a post village in Glengarry county, on St. Lawrence river and a station on the Grand Trunk Railway, thirteen miles east of Cornwall.

In February, 1901, the construction of a wharf was commenced and though not completed, opened to traffic in May following. It consists of a pile head-block, 84 feet long, 72 feet wide; of a pile approach, 25 by 21 feet, and of a stone embankment 493 feet long to Water street, by a width of 21 feet at top with slopes of hand-laid stone inclined 1 in 2 on both sides. A 1½-inch iron pipe railing, on both sides with cedar posts every 10 feet, and a storehouse and waiting-room, erected on head-block, complete the structure.

The works, carried on by day labour cost, $5,013.13 in 1900-1, and $4,862.77 in 1901-2, when they were completed.

In 1904 and 1906 minor repairs and improvements were made at a total expenditure of $770.91.

In May, 1906, renewal was made of 164 lineal feet of walings, with 8 by 10-inch oak and of 1,880 square feet of flooring with 3-inch pine deals. The door of storehouse was repaired and some gravel spread on approach.

During September, 1907, the sum of $149.73 was expended in enlarging freight shed on western side 35 by 20 feet.

LEAMINGTON.

Leamington is a prosperous village situated on the north shore of Lake Erie, in the county of Essex, about thirty-seven miles from the city of Windsor, on the lines of the Père Marquette and Michigan Central Railways. Population about 1,800. It is the centre of a thriving farming district. A large number of oil wells are being worked in the vicinity of Leamington.

At the last session of parliament, the sum of $2,000 was appropriated for repairs to piers, and on August 29, 1907, authority was received to proceed with the work by day labour.

Operations were commenced on October 1, 1907, and were still in progress at the end of the fiscal year.

The work performed consisted in the renewal of the decking of the inner portion of pier; the withdrawal of 112 lineal feet of sheeting on easterly side of and at inner end of pier; the driving of eight oak piles and placing of waling on same; repairing foundation of warehouse; the placing of 152 feet waling on easterly side of pier, as also general repairs to decking of outer end of the pier.

Total expenditure from April 1, 1907, to March 31, 1908, $1,989.42.

LION'S HEAD.

Lion's Head, a village of some 600 inhabitants, is situated on the west shore of the Georgiana bay, in the township of Eastnor and county of Bruce, twenty-two miles north of Wiarton.

At the last session of parliament, the sum of $5,000 was appropriated for the extension of the wharf, and on June 13 last, authority was given to prepare contract plans and specifications for same.

Contract was awarded to Messrs. Kastner & Porter, of Wiarton, to do the work for the sum of $6,990.

The work, commenced on February 10, is still in progress, and consists in the construction of a wooden crib, 100 feet long by 25 feet wide and 22 feet high, resting on a stone foundation, covered with planking and placed at the southeasterly end of the old wharf.

Total expenditure for fiscal year 1907-8, $3,875.67.

MALLORYTOWN.

Mallorytown is a small town on the main line of the Grand Trunk Railway, distant fourteen miles west of Brockville, in the county of Leeds.

On June 6 last, authority was given to expend the sum of $325 in repairing the pavilion at this place.

Work was commenced on June 10 and completed on July 15; it consisted in the rebuilding of the pavilion which had been blown down by a wind storm.

Total expenditure for fiscal year 1907-8, $277.55.

MC GREGOR'S CREEK.

McGregor's Creek, in the county of Kent, flows through the southeasterly part of the city of Chatham and empties into the River Thames.

At the last session of parliament, the sum of $550 was appropriated for the completion of concrete revetment wall at Barrack point, Tecumseh Park, Chatham, and on July 3, 1907, authority was given to proceed with the work.

An agreement was made during the previous year with Robert J. Riddell, of Chatham, for the driving necessary piling and placing of timber grillage, as also for the construction of concrete wall, the concrete to be paid for at the rate of $6.50 per cubic yard, in place.

Work was resumed on August 10, and completed on September 28, 1907; it consisted in constructing 36 lineal feet of concrete revetment wall, 9 feet 3 inches high, with an average width of 3 feet; also in placing a few tie rods from wall to anchor piles in rear. Fifty-one cubic yards of concrete were constructed.

The necessary filling and grading required in rear of wall was then performed by the city of Chatham, as per agreement previously made with the council.

On January 21, 1908, a slip occurred in the high embankment in rear of the wall, exerting tremendously heavy pressure on the structure and causing several ruptures in wall. On February 18, 1908, authority was received to enter into an agreement with Mr. John Flook, of Chatham, for the performance of necessary repairs to this damaged wall, for the sum of $847.30. Work was commenced on March 2, and was in progress at the end of the fiscal year.

Expenditure during fiscal year, $660.51.

MEAFORD.

Meaford, an incorporated town in the county of Grey, situated on the west side of the Georgian bay, 21 miles west of Collingwood and 20 miles east of Owen Sound. It is the terminus of the northern division of the Grand Trunk Railway. Population, 2,500.

On May 21 last, authority was given to do certain dredging, for which a contract was awarded on July 6 last to R. Weddell & Co., of Trenton, at the following prices per cubic yard, scow measurement: rock, $2.30; all other materials, 34 cents.

Work, which was carried on from August 16 to November 2, consisted in dredging in the approaches to and in the outer and inner harbours, widening and deepening same to 20 feet below low water.

A sunken scow was also removed from the angle made by the 'L' and the west pier, where it had, for a number of years, been an obstruction.

At the last session of parliament, the sum of $30,000 was appropriated for the extension of the breakwater and repairs.

A contract was awarded to Mr. Jos. Battle, of Thorold, to do the work for the sum of $34,742.87.

The work consists in the construction of a revetment wall, some 300 feet in length, also 133 feet of temporary close sheet piling and the extension of the outer concrete breakwater 50 feet easterly.

Total expenditure for fiscal year 1907-8:—

Construction and improvements	$ 754 83
Dredging	15,835 94

NORTH BAY.

North Bay, a railway centre in the District of Nipissing, is situated on the north shore of Lake Nipissing. The town is of considerable importance and is growing very fast.

In 1899, a wharf was built at a cost of $17,941.40. The structure consists of a landing pier, 1,030 feet in length, with an 'L' at outer end, 250 feet long; the shore end, for a distance of 780 feet, is of pilework and the outer portion 500 feet of close-face cribwork 25 feet in width. A warehouse, 40 by 20 feet, occupies the inner corner of the 'L.'

During the years 1900-3, expenditures aggregating $4,642.60 were made in improving and repairing this structure.

In May-August, 1907, a strip, 11 feet wide, on the pilework and 9 to 10 feet wide on the cribwork, was planked over with three-inch tamarac. Some of the old planking outside this centre strip had to be renewed with four-inch tamarac and the shore-end of the approach was regraded where it had washed away. Cost of repairs, $1,226.21.

Expenditure during fiscal year 1907-8	$ 3,860 08
Total expenditure to March 31, 1908	26,444 08

OSHAWA.

Oshawa is a town, situated on the north shore of Lake Ontario, in the county of Ontario, and on the main line of the Grand Trunk Railway, 34 miles east of Toronto.

At the last session of parliament, the sum of $200 was appropriated for repairs to the tramway and the coal sheds on the wharf and, on April 17 last, authority was given to proceed with the work by day labour.

Work commenced on May 28 and completed September 24, consisted in repairing the tramway to the coal sheds and repairing the roof of the coal sheds.

On September 28 last, authority was given to purchase two coal sheds on the wharf at this place from the Rathbun Co., of Deseronto, for the sum of $700.

Total expenditure for fiscal year 1907-8, $900.

OWEN SOUND.

Owen Sound is situated at the mouth of the Sydenham river which flows into the head of Owen Sound, an arm of the Georgian bay, in the county of Grey.

On May 21 last, authority was given to do certain dredging for which a contract was awarded on June 29 last, to Mr. A. F. Bowman, of Southampton, at the following prices per cubic yard: scow measurement, rock, $2; all other materials 20c., and for overcasting two-thirds of these prices was allowed.

Work was commenced on May 14 and closed for the season on August 10, it consisted in widening and deepening of the approaches to the harbour; 104,373 cubic yards of clay and sand were removed, of which 4,787 cubic yards were overcast.

On June 18 last, authority was given to do five days' dredging at Carney's lumber wharfs, and the overcast material mentioned above, was removed from a cut at this place.

On November 21, 1906, a contract was awarded to Messrs. Green & McKinnon to construct a concrete revetment wall on the west side of the Sydenham river in this harbour, some 450 feet in length, for the sum of $11,355.

This work was begun on May 20 and completed November 1.

On May 28 last, authority was given to substitute tongued and grooved piling for the close sheet-piling for the revetment wall at a cost of $622 and on August 19 last, authority was given to place 300 feet of railing on the wall at a cost of $190, and also to place life chains along same, and to construct a small boat landing at a cost of $30.

Total expenditure for fiscal year, 1907-8:—

For dredging	$20,997 83
For construction and improvements	12,740 50

PARRY SOUND.

Parry Sound is situated on the east shore of the Georgian bay, in the district of Parry Sound. Population, 3,000. The chief trade is in lumber.

At the last session of parliament, the sum of $1,500 was appropriated for an extension to the wharf, and on May 14 last, authority was given to proceed with the work by day labour.

Work was commenced on June 12, completed July 31, and consisted in the extension of the wharf, 60·5 feet in length by 30 feet in width.

Total expenditure for fiscal year, 1907-8, $1,560.02.

PELEE ISLAND.

Pelee Island is situated on the western end of Lake Erie, 35 miles southeast from the mouth of the Detroit river, and 16 miles south of the town of Kingsville, Essex county. Population of the island is about 600. The products of the island are grapes, wine, fruit and farm produce.

On September 20, 1907, authority was received to expend the sum of $1,500, by day labour, in the performance of urgent repairs required to dock, on west side of island.

Operations were commenced on November 22, 1907, and continued until March 23, 1908; they consisted of the following work: The outer block of dock, which is 40 feet wide, was raised three timbers at outer end and two timbers at inner end and filled with stone; the old deck put back, with the exception of 45 feet in front of warehouse, which is new; the warehouse has been raised 2 feet 7 inches, new ties placed underneath and filled with stone, and the warehouse given two coats of paint; the approach to outer block has been raised at outer end two feet fading back to nothing at 105 feet. The stone that had been washed out has been replaced and the whole approach covered with clay and gravel to form wagon road; eight snubbing-posts have been placed on outer block.

At the last session of parliament, the sum of $5,000 was appropriated for the purchasing of what is known as the Scudder dock, on the north end of the island, and for the performance of necessary repairs and additions to same; on June 29, 1907, authority was received to expend the sum of $3,800 by day labour, on repairs and additions to dock.

Operations were commenced on November 1, 1907, and continued until March 31, 1908. Work performed consisted of the closing with close-faced cribwork of the two outer bays in dock; all the existing cribs were rebuilt from low water level up, with

square timber and filled with stone; the approach to dock was raised with round timbers, the stone filling partially renewed and then covered with clay and gravel to provide surface for roadway.

There are nine bays between cribs, and on the outer five spans, new stringers and decking were placed; on the remaining spans a portion of the stringers and decking were renewed, and whatever remained good of the old material utilized.

Total expenditure from April 1, 1907, to March 31, 1908, $5,003.80.

PIKE CREEK.

Pike Creek is a village in the county of Essex, situated on a branch line of the Grand Trunk Railway, on the south shore of Lake St. Clair, 10 miles east of the town of Windsor. Population, about 200. The principal industry is farming, although considerable fishing is done at the creek.

On May 20, 1907, authority was received to expend, by day labour, the sum of $250 in the construction of 50 feet of sheet-pile protection work on west side of creek and inner end of existing structure, to prevent further erosion of bank; also in the replanking of a portion of easterly pier.

Work was commenced on the 1st and completed on June 17, 1907.

Total expenditure from April 1, 1907, to March 31, 1908, $249.73.

POINT EDWARD.

Point Edward is situated at the head of and on the east side of the St. Clair river, in the county of Lambton, adjoining the town of Sarnia and 61 miles west of London. It is the principal port-of-call for the steamers of the Northern Navigation Company, which load and unload at the spacious Grand Trunk Railway Company's freight sheds.

Owing to the existing swift current in the river, at this point, and the sandy nature of the bottom of Lake Huron, adjoining Point Edward, a large quantity of material is brought down in solution and deposited annually, which necessitates considerable dredging, in order to maintain channel at the dock front of necessary width and depth.

At the last session of parliament, the sum of $29,000 was appropriated for dredging, and on May 13, 1907, authority was received to proceed with the work, a contract having been awarded to Messrs Manley & Company, of Toronto, at the rate of 13 cents per cubic yard, scow measurement.

Dredging was commenced on May 29, and continued until October 21, when appropriation was exhausted. Authority was then received to resume the dredging until the close of the season, as it was found advisable in the interests of navigation to continue this work as late as weather would permit.

Work performed, consisted of the deepening of a channel along 3,400 feet of the dock front, to a depth of 21 feet below L.W.L., and for an average width of 125 feet from face of dock, as also dredging to the same depth and to a distance out of 375 feet of the middle ground, located opposite to, and for some distance below, the Grand Trunk elevator.

It was considered most likely that the existence of this middle ground was largely responsible for the fact that the channel, near this site and along dock, had annually filled in more rapidly than any other portion of the work, and in consequence it was decided to remove said middle ground.

In the execution of the above work, 298,475 cubic yards of sand and gravel were removed.

Total expenditure from April 1, 1907, to March 31, 1908, $39,370.32.

PORK RAPIDS.

Pork Rapids are situated on the Montreal river, seven miles from Latchford, near the point where the river discharges into Bay lake. By the construction of the proposed works, there will be continuous navigation up the river for some forty miles.

At the last session of parliament, the sum of $8,000 was appropriated for the construction of a lock and dam at this place, and, on May 15 last, authority was given to prepare contract plans and specifications for this work.

On March 31 last, work had not yet been commenced.

Total expenditure during last fiscal year for preparation of plans, survey, &c., $303.64.

PORT ARTHUR.

Breakwater.

The town of Port Arthur is situated on the Kaministiquia river, about one mile from its discharge into Thunder bay, at the head of Lake Superior, and on the Canadian Pacific Railway, 750 miles from Collingwood.

On November 5, 1906, a contract was entered into with Mr. J. Hogan for the construction of a breakwater.

During the last fiscal year, seven cribs were partially framed, namely: two cribs, 18 courses high; four cribs, 7 courses high, and one crib, 9 courses high; some 3,489,780 feet B.M. of timber had been delivered on the grounds.

Dredging.

A slip was dredged into the Atikokan Iron Company's property, 130 feet in width and 960 feet in length, to a depth of 22 feet below zero of gauge.

The channel was deepened alongside of Canadian Northern coal and ore dock.

Further dredging was done in the harbour, at south end of breakwater; also in front of Canadian Northern Railway elevator A; Canadian Northern Railway steel dock, and at King's elevator.

Soundings were taken during the winter in the harbour entrance channel, Atikokan slip, and channel to King's elevator.

The total expenditure for the fiscal year ending March 31, 1908, including dredging, construction, improvements, &c., was $88,958.30.

PORT BRUCE.

Port Bruce is situated at the mouth of Catfish creek, in the county of Elgin, on the north shore of Lake Erie, and about five miles south of Aylmer. Population, about 100. Principal industry is fishing, in the pursuance of which it ranks as an important point.

At the last session of parliament, the sum of $1,000 was appropriated for repairs to piers, and authority was received on May 14, 1907, to expend this grant by day labour. Operations were commenced on June 1 and continued until June 21, 1907.

Work performed consisted of adding two rows of timbers to the 90-foot extension of westerly dock, which was partly constructed at the expiration of the past fiscal year; the partial filling of same with 85 cords of stone and construction of a small amount of decking. Sundry repairs were also made to easterly pier.

Total expenditure between April 1, 1907, and March 31, 1908, $665.11.

PORT BURWELL.

The works done during the fiscal year ending March 31, 1908, included the filling with stone of the cribwork superstructure of retaining wall, at the west side of the

turning basin; the decking of same, and the completion of the sand filling behind the same wall. The whole turning basin dock was completed by June 18, 1907.

The planking joints and some of the timber cross-ties of the outer block, on the west pier, which had been badly broken by the accumulation of ice and the force of the waves, were removed.

The next work taken up was repairing or patching of face pile-work, on the west side at the inner end of the harbour, where new sheathing, brush and old logs were placed to protect the earth backfilling from being washed away.

The lake shore breakwater, being loose and moving at every sea, was braced and bolted, and repairs were made to the piers and docks which had been damaged by the coal ferry SS. *Ashtabula*.

Dredging.

The dredge *Ontario* arrived at Port Burwell on August 31, 1907, and worked intermittently up to November 23, when it was laid up for the season. Different areas in the harbour were dredged over to a depth of 19 feet.

Total expenditure for last fiscal year, including dredging, construction, improvements and repairs, $10,269.08.

PORT COLBORNE.

During the fiscal year ending March 31, 1908, tenders were called for the furnishing and placing against the lake side of the western breakwater at Port Colborne, of 5,000 cubic yards of stone, and of 6,000 cubic yards of concrete blocks, varying in weight from 5 to 10 tons.

The contract was awarded to Mr. M. J. Hogan, and at the close of the season, the whole of the stone had been deposited against the breakwater, and all the concrete blocks had been made, but only a small number could be placed in position owing to rough weather.

This work will be proceeded with early next year, and will, it is expected, prove an effectual protection against the terrific storms from the southwest.

During the fiscal year, in April and May, 1907, the sum of $3,515.96 was expended in general repairs to the western breakwater, principally in filling in with concrete a number of small breaches caused by storms during the months of December and January, and in replacing the timbers which had been carried away. The work was done by Mr. M. J. Hogan and satisfactorily completed on May 22, 1908.

The total expenditure was, at the end of the fiscal year, $42,888.87.

PORT ELGIN.

Port Elgin is a harbour of refuge, situated on the east shore of Lake Huron, in the county of Bruce, five miles south of Southampton and 56 miles north of Kincardine. It is on the Wingham, Grey and Bruce division of the Grand Trunk Railway.

Population, about 1,600.

It is a port of call for local steamers, and the principal export is timber, tanbark and cordwood. The Grand Trunk Railway have constructed a spur line from station to pier.

A contract was let to Mr. W. L. Horton, of Goderich, Ontario, to perform the necesary dredging, at 25 cents per cubic yard, scow measurement.

Work, commenced on July 5, and continued until July 20, 1907, consisted of the excavating of two cuts, approximately 660 feet long, to a depth of 13 feet below low water level, to provide safe entrance to dock in harbour.

Some 11,020 cubic yards of sand and gravel were removed at a total cost of, including inspection, $2,800.

PORT HOPE.

Port Hope is situated on the north shore of Lake Ontario, in the county of Durham, 83 miles east of Toronto, on the Grand Trunk Railway. The chief trade is in lumber and grain. Population, 4,500.

At the last session of parliament, the sum of $8,000 was appropriated for repairs to piers and dredging, and on May 14 last, authority was given to proceed with the repairs by day labour.

The work consists in replanking and rebuilding portions of the east pier; the west side of the west pier was also built up, over a length of 225 feet with new face-timber; a new crib, 8 feet square, sunk between two old cribs in an opening through which sand, &c., washed into the harbour entrance. A portion in front of the G.T.R. elevator, extending 350 feet therefrom, was repaired with plank removed from other portions of piers; a portion of wharf, 25 feet long, in front of the Standard Ideal Co., was temporarily repaired with old face-timbers, ties, &c.

Total expenditure for fiscal year 1907-8, $5,183.55.

PORT ROWAN.

Port Rowan, Norfolk county, is on the north shore of Lake Erie, in the inner bay of Long Point, 21 miles from the town of Simcoe.

On August 9, 1907, authority was received to expend, by day labour, the sum of $225 in repairing approach to dock which had suffered severely from erosion.

Work was commenced on the 2nd, and completed on September 18, 1907, and consisted in the refilling with gravel of northerly side of approach; the rebuilding of portions of the dry stone retaining wall on this side of approach; a small amount of sheeting was also renewed at outer end of dock.

Total expenditure from April 1, 1907, to March 31, 1908, $225.

PORT STANLEY.

Port Stanley is an important harbour of refuge, situated on the north shore of Lake Erie, at the mouth of Kettle creek, in the county of Elgin, 8½ miles by rail south of the city of St. Thomas, and 23½ miles south of the city of London. It is the terminus of the Pere Marquette Railway and of the Southwestern Traction Company Electric Railway.

A coal ferry, owned by the Lake Erie Coal Company, of Walkerville, Ontario, carrying thirty cars, of 100,000 lbs. capacity, plies between this port and Conneaut, Ohio, making on an average two round trips every thirty hours.

The construction of a grain elevator, by the John Campbell Company, Limited, of St. Thomas, for the purpose of bringing grain direct from Fort William, increases the necessity of keeping this harbour and its entrance dredged to a sufficient depth to accommodate deep draught vessels.

At the last session of parliament, the sum of $85,000 was voted for harbour improvements.

The work of repairing the pier was first carried on; it consisted in the driving of 95 lineal feet of 8-inch by 8-inch by 28 feet pine sheet piling together with necessary anchor piles and tie rods to protect face of westerly pier, immediately south of grain elevator; also the levelling up of dock and renewal of decking in various portions of pier; the reconstruction of the outer ends of both piers, including the protection of corners with sheeting and iron corner plates; the drawing in and repairing of several feet of sheeting on the inner face of the westerly pier in the vicinity of the life-boat station; the construction of 180 feet of close crib breastwork, 10 feet wide, 6 feet high and filled with stone ballast, as protection to approach to easterly pier.

PORT STANLEY.

Breakwater.

On July 20, 1905, a contract in the sum of $105,828 was awarded to the Pacific Construction Company, of Ottawa, for the construction of two breakwaters, each 500 feet long, to outer entrance to harbour; in April, 1906, this contract was transferred to Messrs. Haney and Miller, of Toronto.

It was subsequently decided to change the site first proposed for the breakwaters and to construct one breakwater, 1,000 feet long on site of entrance to harbour, the inner end to connect with the existing Pere Marquette pier. This change will give complete protection from the prevailing winds which are from the southwest and will also tend to stop the filling up of channel at entrance to piers by storms from southwest.

Work was commenced on August 7, 1906, and has been carried on more or less continuously since, during season of navigation. After closing down for the winter, 1906, work was resumed on April 4, 1907, and continued until November 30 following, when it was again closed down for the winter. By that date, 400 feet of substructure, composed of close-face cribwork with stone ballast, was built and placed in position. The cribs, for the remaining 600 feet, are nearly all constructed and moored in inner harbour ready to be placed as soon as weather will permit and berths can be provided.

Dredging.

Contract for dredging in inner harbour was awarded to the Canada Construction and Dredging Company, of Toronto, at the price of 15½ cents per cubic yard, scow measurement; subsequently it was arranged to pay this company 27 cents per cubic yard scow measurement, for dredging channel at outer entrance to harbour, and 35 cents per cubic yard, scow measurement, for the dredging of berths for breakwater.

Work was commenced on August 19 and continued until November 4, 1907, when it was closed down for the winter.

Work performed consisted of the deepening of a portion of the basin in inner harbour and of channel between piers to a depth of 19 feet below L.W.L.; a few days' dredging at outer entrance to piers to a depth of 21 feet below L.W.L., as also the excavation of 400 feet of berths for breakwater. Some 36,651 cubic yards of clay, sand and stones were removed.

Total expenditure from April 1, 1907, to March 31, 1908, including improvements, repairs, dredging, &c., $44,308.18.

RAINY RIVER.

Rainy river is a large stream connecting Rainy lake with Lake of the Woods. There is continuous navigation from Kenora on the north side of the Lake of the Woods, to the foot of the Long Sault rapids on this river, and, by the construction of the proposed works, navigation could be continued to Fort Frances without interruption.

At the last session of parliament, the sum of $50,000 was appropriated for improvements at the Long Sault rapids.

The work consists in the construction of one concrete lock, 290 feet long by 60 feet wide; concrete dam, 730 feet long with 7 stop-log openings, each 25 feet wide and 9 feet deep; one fish ladder, and one log-way, also dredging a channel, 1,000 feet long by 100 feet wide ,and construction of concrete retaining walls and two abutments.

Expenditure during last fiscal year for preparation of plans, surveys, &c., $502.50.

RAMA.

Rama is a village on an Indian reserve on the east shore of Lake Couchiching, in the township of Rama, in the county of Ontario, distant three and one-half miles northeast of the town of Orillia.

On May 28 last, authority was given to expend the sum of $100 and on July 16 last, a further sum of $300 was authorized for repairs to the wharf, by day labour.

Work was commenced on August 19 and continued till August 30, then suspended until January 2 as it was found that it could be carried on more advantageously from the ice, and was completed January 13.

The work consists in the reconstruction of the outer crib and superstructure which had been damaged by ice.

Total expenditure for fiscal year 1907-8, $272.52.

RICHARD'S LANDING.

Richard's Landing is a small village on the north shore of St. Joseph's island, in the Georgian bay. It is distant nine miles by water from Desbarats, the nearest railway point.

On May 14 last, authority was given to expend the sum of $500 for repairs to the wharf at this place by day labour.

Work was commenced on June 21, completed July 18, and consisted in the re-decking of the structure where necessary.

Total expenditure for fiscal year 1907-8, $496.65.

RIVER À LA PUCE.

Puce is a village situated on the south shore of Lake St. Clair, on the London and Windsor line of the Grand Trunk Railway, 13 miles east of Windsor, and 97 miles west of London. Population, about 200.

Authority was received on January 13, 1908, to expend by day labour the sum of $250 in extending the sheet piling on both sides of the river, which was rendered necessary by erosion which had occurred to both banks at these points.

Operations were commenced on the 2nd and completed on March 31, 1908, and the work performed consisted of the driving of 48 lineal feet of three-inch oak piling on the easterly side and at inner end of harbour, and 20 feet of some close-faced piling on the westerly side of harbour.

Total expenditure from April 1, 1907, to March 31, 1908, $217.79.

ROCHE'S POINT.

Roche's Point is a small summer resort on the west shore of Cook's bay, an arm of Lake Simcoe, and in the county of York.

At the last session of parliament, the sum of $3,200 was revoted for the completion of this wharf, and on May 14 last, authority was given to proceed with the work by day labour.

Work was commenced on January 14 and is still in progress; it consists in the construction of a wharf, 255 feet in length by 20 feet in width, composed of a stone approach, 155 feet long by 20 feet wide, extending out to a timber wharf which is composed of cribs and spans, 100 feet in length by 20 feet in width.

As the amount re-voted, viz., $3,200, was not sufficient to complete the work, a further sum of $312 was authorized on March 28 last.

Total expenditure for fiscal year 1907-8, $1,456.40.

RONDEAU.

Rondeau is an important harbour of refuge, situated on Pointe aux Pins, about 19 miles south of Chatham and 45 miles west of Port Stanley. It is a favourite summer resort and the terminus of the Sarnia and Rondeau branch of the Pere Marquette Railway.

In the inner harbour and at westerly side along coal dock, a modern and extensive coal handling plant is used by the Lake Erie Coal Company, for unloading coal from their boat, which runs regularly between this port and Conneaut, Ohio. A large revenue is realized on the duty collected on this coal. It is the headquarters of the 'Post Fishing Company,' of Sandusky, Ohio, who have two steam tugs working out of this harbour, and who export a large quantity of fish annually.

At the last session of parliament, the sum of $60,000 was appropriated for harbour improvements, and on June 22 last, authority was received to expend, by day labour, the sum of $3,150 on repairs to piers.

Operations were commenced on July 8, 1907, and completed on January 28, 1908.

Work was done as follows: On easterly pier, the driving and fastening of some 68 lineal feet of 8 by 12-inch by 32 feet sheet piling at inner end of pier; the partial reconstruction of extreme outer end of pier; the closing, by the driving of sheet-piling, of short gap on easterly face of this pier, as also the renewal of decking on various portions of pier; on west pier the tearing down and renewal of face-timbers and portion of cross-ties for 60 feet of pier, as also the partial renewal of decking to same; repairing and renewal of considerable of the waling. In addition to above, two clusters of spring-piles, containing six piles each, were driven, one at the inner end of east pier and the other on the north end of west pier and securely wrapped with ¾-inch wire cable.

A large scow was constructed for use in connection with these works and was almost completed at the end of the fiscal year.

Dredging.

On May 18 last, authority was received to proceed with dredging, a contract having been let to the Canada Construction & Dredging Company, of Toronto, at the rate of 15½ cents per cubic yard, scow measurement, for dredging inside of harbour; subsequently an arrangement was made for the payment of 27 cents per cubic yard, scow measurement, for dredging to be performed outside of piers.

Dredging commenced on July 8, and continued until August 7, 1907, when plant was moved to Port Stanley. Between these dates, the work performed consisted of the deepening of channel at outer entrance of piers, 125 feet wide for a distance of 500 and 100 wide for an additional 500 feet; also in the widening of inner basin, by one cutting, 25 feet wide and 500 feet long. All of the dredging was performed to a depth of 20 feet below L.W.L.; 18,216 cubic yards of sand were removed.

Expenditure from April 1, 1907, to March 31, 1908, including dredging, repairs, &c., $6,398.59.

Repairs to Pier.

Labour and superintendence	$1,086 89	
Materials, timber, iron, stone, &c.	924 24	
	$2,011 13	
Dredging, including inspection	4,387 46	
	$6,398 59	

ROSSEAU.

Rosseau is a summer resort situated at the northerly end of Lake Rosseau, in the district of Muskoka, and is very popular with tourists.

At the last session of parliament, the sum of $300 was appropriated for repairs to the wharf, but, as this amount was not sufficient, a further sum of $176.72 was authorized on July 3 last.

The work, commenced on April 19 and completed May 31, consisted in building an additional walk 70 feet long by 20 feet wide, and the repairing of the driveway, 70 feet long by 16 feet wide, and making other necessary repairs.

Total expenditure for fiscal year 1907-8, $518.68.

ROSSPORT.

Rossport, a village of some 200 inhabitants, is situated on the main line of the Canadian Pacific Railway, 14 miles west of Schreiber, on the north shore of Lake Superior, in the district of Thunder Bay. It is a fine natural harbour. The chief industry is fishing.

At the last session of parliament, the sum of $5,000 was appropriated for the construction of a wharf and plans and specifications were prepared and a contract was awarded to Mr. Chas. H. Sherwood, of Port Arthur, to perform the work for the sum of $7,288.

The work consists in the construction of a wharf with a stone approach, 170 feet long by 20 feet wide on top, extending from the shore to the cribwork, which is 76 feet long by 20 feet wide, and at the end of which there is an 'L,' 60 feet long by 20 feet wide.

The total expenditure at the end of the last fiscal year was $194.84.

SAND POINT.

Sand Point, in the county of South Renfrew, is located on the south shore of Chats lake, an expansion of the Ottawa river. Being on the main line of the Canadian Pacific Railway between the important towns of Renfrew and Arnprior, Sand Point is a local junction for water and rail traffic, especially for the farm produce from the Quebec side. Besides, there is a well established summer resort opposite, at Norway Bay, the natural outlet of which is via Sand Point.

All present passenger and packet freight traffic is handled by a ferry boat of shallow draught.

On December 19, 1907, a contract was entered into with J. J. Fallon for the construction of a small permanent wharf for a bulk sum of $6,994. Construction was started in February; on March 20, authority was given to extend the wharf by placing the landing-head 50 feet farther out, at an extra cost of $2,030. The status of the work at the end of the fiscal year showed that nearly 50 per cent had been completed.

The structure is to consist of: A landing, 50 by 68 feet, and an approach 18 feet wide, 232 feet long, built of dry masonry walls battering one in one, two for a distance of 147 feet out, and further of similar walls battering one in four, with 12-inch concrete veneer above low water level, placed on light cribwork understructure; a back-filling of quarry refuse and gravel topped with road metal at a height of 8½ feet; and a one-story umbrella roof freight shed and shelter, 10 by 18 feet.

Expenditure during the fiscal year 1907-8, $4,469.56.

SAULT STE. MARIE.

Sault Ste. Marie is situated at the head of St. Mary's river, which connects Lakes Superior and Huron, in the district of Algoma, and is on the main commercial route from the great west to the seaboard. The tonnage passing through the canals at this place last year totalled nearly 35,000,000.

On March 23 last, authority was given to repair the damage done to the government wharf, caused by the Canadian Pacific Railway steamer *Athabasca* colliding with the east side thereof.

Work was commenced on April 1 and completed May 25; it consisted in repairing and renewing the concrete superstructure and waling.

On June 28 last, authority was given to repair the damage to the government wharf caused by the Canadian Pacific Railway steamer *Athabasca* again colliding with same, but on the south side.

The work, which was begun on June 15, and completed August 15, consisted in repairing the concrete superstructure, and also replacing portion of the warehouse in the position from which it had been removed by force of the collision.

Portions of the old wharf were also replanked.

On April 5 last, a contract was awarded to Mr. A. F. Bowman to perform certain dredging at the following prices per cubic yard, scow measurement: rock, $3.15; boulders, $1.50, and all other materials, 57c.

Dredging was commenced on September 3 and closed for the season on December 17, during which time the dredge removed 24,841 cubic yards, rock, boulders and other material, from the approach to the new government wharf and from the channel leading to the Canadian lock of the 'Soo' canal, in order to give direct connection from one to the other.

Total expenditure for fiscal year 1907-8:—

Improvements and repairs	$ 4,650 40
Dredging	49,999 87

SAUGEEN RIVER.

Saugeen river empties into Lake Huron at a point about 32 miles from Walkerton and about 43 miles from Sarnia. At the mouth of the river is situated the thriving town of Southampton.

At the last session of parliament the sum of $7,600 was appropriated for improvements at mouth of river. On May 27, 1907, authority was received to expend, by day labour, the sum of $3,000 on repairs to piers.

Operations were commenced on June 19 and completed on December 13, 1907, and the work was done as follows:—

On South Pier.—120 feet of outer end of this pier was raised two feet, filled and decked; 110 feet of pier was partially refilled and decked with stone and gravel, and a timber revetment crib, 37 feet long, 10 feet wide and 5 feet high, was constructed at the inner end of this pier.

North Pier.—105 feet of decking was renewed, some stone-filling was renewed and sundry repairs were made to remainder of pier.

Total expenditure from April 1, 1907, to March 31, 1908, $3,099.96.

SEVERN RIVER.

Severn river (McDonald's Chute) is situated not far below Sparrow lake, and is a narrow gorge on the main branch of the Severn river.

At the last session of parliament, the sum of $1,000 was appropriated for improvements in the Severn river, at McDonald's Chute No. 1.

Work was proceeded with by day labour on October 1 and completed November 22; it consisted in the removal of rock to deepen and widen the channel, in order to allow an increased flow of water and thereby prevent, as far as possible, the flooding of farm lands.

Total expenditure for fiscal year 1907-8, $1,019.31.

SHREWSBURY.

Shrewsbury is a small village on the north shore of Rondeau bay, in the county of Kent, 20 miles southeast of Chatham and 5 miles south of Blenheim; it is the centre of a farming district.

On October 24, 1907, authority was received to expend, by day labour, the sum of $45, in repairing damage done by erosion to the approach to dock.

Work was performed between October 30 and November 5, 1907, and consisted in placing necessary stone-filling in approach.

Total expenditure from April 1, 1907, to March 31, 1908, $49.43.

SOUTHAMPTON.

Southampton is a prosperous town situated at the mouth of the Saugeen river, in the county of Bruce, and on the east shore of Lake Huron, 32 miles from Walkerton, the county town; it is a terminus of the Grand Trunk Railway, a harbour of refuge, and port of call for steamers of the Algoma Steamship line. Population, about 2,000.

At the last session of parliament, the sum of $2,200 was appropriated for repairs to Chantry Island breakwater, and in addition, the sum of $10,000 was appropriated for the extension of and repairs to town dock. Subsequently, an additional expenditure of $800 was authorized to repair, by day labour, damage done by the collision of the schooner *Erie Stewart* with breakwater during heavy storm which occurred on October 7.

On May 14, 1907, authority was given to proceed with repairs to breakwaters, and operations were commenced on May 22, 1907, and continued until end of fiscal year.

Work performed consisted of general repairs to these breakwaters, merely sufficient to maintain them in such condition that the storm seas would not make breaches.

In repairing damage done by the collision of the schooner *Erie Stewart* with the westerly breakwater, the larger portion of face-timbers were renewed, together with a number of cross-ties and decking.

A contract for the extension of and repairs to town dock was awarded on December 6, 1907, to Messrs. Kastner & Porter, of Wiarton, Ontario, for the sum of $41,000. Between the date of the award of contract and the end of the fiscal year, the contractors were employed in securing and delivering the necessary material and plant for the work.

Total expenditure from April 1, 1907, to March 31, 1908, $3,417.58.

SOUTH NATION RIVER.

The South Nation river has an irregular course of 100 miles through five counties in Ontario and flows into the Ottawa river at Wendover, Prescott county. It has a watershed of 1,410 square miles extending northeastely across the eastern Ontario peninsula from near Brockville on the St. Lawrence. This river has gradually lowered its low water surface and raised its high water surface several feet, owing to deforestation. Conditions of flow are such that the spring floods or continued rain create an abnormal torrent, while moderately dry weather reduces the discharge to only a few cubic feet per second.

It is estimated that 29,000 acres of farm lands suffer considerable damage every year, owing to the restricted capacity of the river to cope with the drainage.

The South Nation is navigable between Plantagenet and Casselman, 36 miles. Below Plantagenet, the river flows seven miles to the Ottawa river, being navigable up to Jessup's falls, two and one-half miles from the mouth.

Reviewing the improvements effected on the South Nation since confederation, expenditures for improvements on account of drainage, were made as follows: Up to 1884, $235.66; in 1887, a bonus of $1,000 was granted to the United Counties Drainage Committee; in the years 1887-89, a rocky shoal at the mouth of Moose creek, twelve miles above Plantagenet, was removed to a depth of 6 feet, at a cost of $11,526.55; in 1899-1900, some dredging was done below the Casselman bridge, with the dredge

Dundas, built by the settlers, cost of operations, $2,216.04; in 1900-2, the rock cut through the 'pitch-off' at Plantaganet, made some years previously, was widened to 360 feet at a cost of $10,458.05. Total, $25,436.30.

The following expenditures for dredging at the mouth of the South Nation, on account of Ottawa river navigation, are also noted: In 1887, $670.44; in 1906, $1,652.81. Total, $2,323.25.

With a view of further improving the drainage by rock cutting through the reefs at Plantagenet, Haggar's dam and water power privilege were acquired by the Crown for the sum of $15,000. The power was first developed in 1811 and has been maintained up to March 16, 1908, when the dam was blasted out during the early spring flood, at a net cost of $32,037.

Seven claims, aggregating $46.72 for minor damages from blasting were paid.

Expenditure during the fiscal year 1907-8, $15,658.62.

ST. JOSEPH.

St. Joseph is situated on the east shore of Lake Huron, in the county of Huron, about fourteen miles south of Goderich. Population, about 50.

During session of parliament of 1902, the sum of $5,000 was appropriated for the building of a wharf at this point. Wharf was partly constructed by day labour and contract was let in June, 1904, for the completion of same, for the sum of $3,950.

At the beginning of the last fiscal year, 230 feet of dock, consisting of close-faced cribwork, filled with stone ballast, and reaching to height of 4 feet 6 inches above L.W.L. was constructed but stone approach to dock was only partially built.

On October 28, 1907, authority was received to expend by day labour the sum of $1,200 in completion of the construction of approach to wharf, as also in the renewal of small portion of filling which had settled in body of dock.

Subsequently, an additional amount of $300 was authorized for the completion of this work.

The work resumed on November 2 and was in progress at the end of the fiscal year; it consisted of the partial completion of 143 feet of stone approach, 18 feet wide at top, including the providing and driving of pile protection-work along outer 103 feet on northerly side of approach, in order to break the heavy seas which attack the approach from the northwest.

Expenditure from April 1, 1907 to March 31, 1908, $1,198.45.

STANLEY ISLAND.

Stanley island is in the St. Lawrence river, opposite Summerstown in Glengarry county, some nine miles northeast of Cornwall. It is a much frequented summer resort.

Last summer, the government decided to buy from Mr. D. B. McLennan of Cornwall, his wharf, situated opposite the Algonquin Hotel, for the sum of $500. This wharf, first built in 1880, repaired and enlarged in 1887 and 1900, consists of:

Crib and span head-block, 140 feet long and 25 feet wide, and of 24-foot appoach formed of a 20-foot span, from head-block to stone embankment which is 40 feet long to shore.

Along the whole front of the head-block there is a pile addition, 15 feet wide at downstream end and 1 foot wide at other end. The wharf is 18 feet high, sunk in 14 feet of water.

Repairs to and enlargement of this structure were begun in June and completed at the end of August. The ice-breaker from the low water level, the stringers of head-block, the span approach and the whole of the flooring were all renewed. The block was enlarged on piles, on downstream side, 60 by 24 feet, making total face length of head-block 200 feet besides the ice-breaker.

Expenditure, inclusive of purchase of old wharf, $3,749.87.

The wharf is now in good condition.

STURGEON FALLS.

Sturgeon Falls is a station of the Canadian Pacific Railway, where it crosses the Sturgeon river, about 25 miles west of North Bay. Population, 1,590. Sturgeon river is navigable from Lake Nipissing to this town.

On August 8 last, authority was given to expend the sum of $150 in repairing the wharf, &c.

Work was performed between December 12 and December 21, and consisted in repairing warehouse and wharf.

Total expenditure for fiscal year 1907-8, $150.

SUMMERSTOWN.

Sumerstown is a post village in Glengarry county, on Lake St. Francis, St. Lawrence river, three miles from Summerstown station on the Grand Trunk Railway, eight miles east of Cornwall and 6 miles west of Lancaster.

A crib wharf, having a face length of 130 feet, and a width of 20 feet, with an approach of 85 feet in length, formed of three cribs and three 20-foot spans, was built in 1886-7. It has a height of 11 feet at outer face and is sunk in 7 feet of water at low level.

In the fall of 1888, a warehouse, 24 by 30 feet, was constructed on shore near downstream side of approach.

Up to June 30, 1900, the structure had cost $15,448.41.

In November, 1900, temporary repairs, especially to flooring, cost $554.61.

From March to June, 1902, the head-block was razed to low water level and rebuilt with close-faced 12 by 12-inch timber; the two spans nearest to shore were completely filled in with stone; both piers being entirely encased so as to form a continuous stone embankment, 65 feet long by a width of 20 feet at top, with both sides riprapped and sloped one in one. The 20-foot span from embankment to head-block, was bridged with 12 by 12-inch stringers supporting three-inch pine flooring. The flooring of head-block was also renewed, the two outside corners were sheathed with steel boiler plates six by six feet by ½-inch; the fence of cattle yard near storehouse renewed and painted, and the latter improved. Expenditure, $895.07.

During September, 1907, minor urgent repairs to flooring of head-block and to storehouse cost $18.90.

The structure was transferred to the control of the Department of Marine and Fisheries in March, 1890.

SYDENHAM RIVER (NORTH BRANCH) LAMBTON COUNTY.

Sydenham river has its outlet in Chenal Ecarté, the passage between St. Anne Island and the mainland. From its mouth to Wallaceburg, it is a large navigable stream; above this point, it divides into two branches on which small steam craft with scows are run and booms of timber are rafted.

On October 7, 1907, authority was received to expend by day labour, the sum of $500 in the removal of logs, forming obstruction, in the north branch of the river, between Winters and Wilkesport.

Work was commenced on October 11 last, and continued until November 23, when work closed down for the winter and during which time approximately 1½ miles of the river was cleared, at intervals, of accumulations of logs, trees, &c.

On May 13, 1907, authority was received for the performance of the dredging of a channel at the entrance to the Chenal Ecarté, where this river empties into Mitchell's bay. Contract for this work was let to the Chatham Dredging and General Contracting Company, Limited, of Chatham, Ontario, at 20 cents per cubic yard, scow measurement.

Dredging was commenced on July 1, and continued until August 7, 1907, when work was completed. Two cuts, one 1,387 and the other 1,466 feet long, were made, to a depth of eight feet below L.W.L., which left a good channel with a minimum width of 60 feet and depth of nine feet below L.W.L., at the entrance to the river.

Total expenditure for last fiscal year, $1,977.86.

THESSALON.

Thessalon is situated on the north shore of the north channel of Lake Huron, in the district of Algoma, 50 miles east of Sault Ste. Marie. Considerable lumber is shipped from this place.

The department decided to remove a rock on the south side of the government wharf, and arrangements were made with the C. S. Boone Co. to perform the work.

Drilling was commenced on September 15, 1906, and carried on to October 20, 1906, then resumed on August 10, 1907, and continued until August 19, 1907, and the dredge worked from July 6 to 11, 1907, and from August 19 to 23, 1907, removing some 651½ cubic yards of rock.

On February 21 last, authority was given to remove the warehouse from the old government wharf to form an addition to the warehouse on the new government wharf.

Total expenditure for fiscal year 1907-8 was as follows:—

Construction and improvements	$494 41
Dredging, &c.	117 50

THORAH ISLAND.

Thorah Island is situated in Lake Simcoe, three miles from Beaverton, the nearest railway point.

On May 14 last, authority was given to expend the sum of $350 for dredging.

Arrangements were made with Messrs. Brown & Aylmer, of Cambridge, to perform the work at 25c. per cubic yard, scow or place measurement.

The work commenced on July 10 and was completed on July 11; it consisted in the dredging of a slip, being an extension of the one already constructed.

The dredge removed some 804 cubic yards of clay and gravel, which was overcast and levelled to form a landing.

Total expenditure for fiscal year 1907-8, $283.04.

THORNBURY.

Thornbury, an incorporated town in Grey county, is situated at the mouth of the Beaver river, which empties into Georgian bay, and is on the Meaford branch of the Grand Trunk Railway, eight miles from Meaford and fourteen miles from Collingwood. Population, 1,000.

On May 21 last, authority was given to do certain dredging, for which a contract was awarded on July 6 last to R. Weddell & Co., of Trenton, at the following prices per cubic yard, scow measurement: rock, $2.30; all other materials, 34c.

Work was commenced on May 27 and closed for the season on August 17; it included the dredging of a turning basin and the widening and deepening of the approaches thereto.

In doing the above work, the dredge removed some 42,094 cubic yards of sand, mud and gravel.

Temporary repairs were also made to the breakwater, consisting chiefly in placing large stones to protect the beach.

Following was the expenditure for fiscal year 1907-8:

Dredging, &c.	$14,496 28
Improvements and repairs	99 66
	$14,595 94

TORONTO.

Toronto harbour is situated on the north shore of Lake Ontario, and is formed by a circular bay 1½ miles in diameter separated from the lake by a large island (formerly a peninsula) about six miles long, making a safe, well-sheltered harbour capable of containing a large number of vessels.

With a view to do certain dredging at this place, a contract was awarded on July 9 last to the Windsor Dredging Company, of Windsor, at the following prices per cubic yard, scow measurement: rock, $4; all other materials, 13½c.

Work was commenced on June 24 and closed for the season on November 30; it consisted in the widening and deepening of the approach to the eastern gap, to a depth of 20 feet and width of 400 feet, and dredging between the pier of the eastern channel to a minimum depth of 18 feet. Two cuts, near to the proposed Royal Canadian Yacht Club, were also excavated; some 176,349 cubic yards of sand were removed.

At the last session of parliament, the sum of $28,000 was appropriated for repairs to the breakwater on the south shore of the island, and, on June 14 last, authority was given to proceed with the work by day labour.

Work was commenced on April 1 and continued until March 31; it consisted in placing large stones along the breakwater to protect both the breakwater and the island; in the placing of two pile groynes, and the driving of footing piles along the foot of slope of stone riprap. The groynes are placed 500 feet apart and are 12 feet wide by 100 feet long.

The amount of $5,290 was authorized for expenditure on repairs to the sheet-piling of the east pier at the eastern gap. The work was begun on August 1 and completed on October 30.

On December 23 last, authority was given to employ 40 men to remove the decayed superstructure of the northerly 1,400 feet of the east pier of the eastern gap. The expenses incurred in this connection were charged against the $28,000 appropriated for repairs to the breakwater.

The total expenditure for fiscal year 1907-8 is $49,520, including $23,654.16 for dredging.

TREADWELL.

Treadwell is a post settlement in Prescott county, and a port of call for the steamers of the Ottawa River Navigation Company, thirteen miles from L'Orignal, the county seat, and eighteen miles from Rockland.

The government decided, in the spring of 1905, to build a new wharf in this locality. The old Brown wharf, including a 30-foot wide and 250-foot long right-of-way, was bought and transferred to the Crown for the sum of $600. Reconstruction and building was begun in May of the same year.

The structure now consists of head-block 33 feet wide and 116 feet long at top, formed by a double row of close-faced and stone filled cribs, 133 feet long, 10 feet wide and 17 feet clear apart, standing 1 foot above low water, the outside face of outer crib being sunk in 9 feet 6 inches of water. On each row, rests a superstructure 10½ feet high, with an ice-breaker of granolithic concrete mixed 1: 3: 5. The outer wall had a width of 6 feet 1½ inch at bottom, and 1 foot 9 inches at top, the outside face being inclined 1 in 12 and the inside face 1 in 3. The inner wall is 5 feet and 1 foot 9 inches wide at bottom and top respectively, and has faces inclined 1 in 12 and 1 in 5. The front wall is reinforced every 10 feet by 1½ inch vertical iron

bars, with plates inserted in the concrete near the outer face. The top of said wall is anchored to the bottom of rear wall by four 1½-inch iron bars 32 feet long. Two slips, each 10 feet wide and at elevation of 3½ feet leading to lower story of freight shed, and 7 feet from low water, was made in the face. The 3-inch pine flooring rests on a steel structure composed of 24, 20 and 18-inch I-beams with 8-inch connections distanced 3½ feet. The outside face of head-block stands 20 feet high in 9½ feet of water at low level. The approach, 123½ feet long, is of stone, 18 feet wide at top with sides of large rubble stone inclined 1 in 7. One side slip, leading to lower story of shed. A two-story freight shed, 40 by 24 feet, resting on 6 concrete pillars and on part of rear wall of head-block, completes the structure.

Materials consisting of stone, lumber, sand, iron bars and steel spans, were bought and work commenced in May, 1905. At the end of June following about four-fifths of stone approach was completed at an expenditure of $5,074.76.

In July and August of the same year, the cribs were built and sunk in place. The concrete superstructure was commenced in September and completed at the end of November, making expenditure during 1905-6, $3,599.63.

The structure, outside of storehouse, was completed in August, 1906, at a further cost of $2,810.92.

During October, 1907, a fine plank railing, with 8-inch cedar posts every 8 feet, was placed on both sides of the approach, and the storehouse completed. Expenditure, $1,397.91.

WENDOVER.

Wendover is a post settlement in Prescott county, and a proposed station on the Ottawa extension of the Canadian Northern Quebec Railway, twenty-four miles from Hawkesbury.

The construction of a wharf was commenced by day labour in September, 1901. The structure consists of the following:

(1) A stone embankment of a length of 160 feet from the shore by a width of 18 feet at top with sides sloped 1 in 1 and a height of 12 feet.

(2) A trestle or pile approach of a length of 342 feet from above to head-block, by a width of 18 for 294 feet and a width of 60 feet for the remaining 48 feet, adjacent to the head-block.

(3) A pile head-block, laid at an angle of 82 degrees and 30 minutes with the approach, of a length of 71 feet by a width of 32 feet ,with a close-faced cribwork ice-breaker 37 by 24 feet at its upstream end.

(4) A storehouse and waiting-room, 20 by 36 feet, erected on pile approach.

The wharf, though not completed, was opened to traffic in June, 1902. Expenditure 1901-2, $6,502.22.

During the fiscal year 1902-3, the sum of $3,083.17 was expended in building the pile ice-breaker and one of the clusters of piles mentioned above, in bracing the pile approach and in raising the stone embankment.

The wharf was completed at the end of fiscal year 1903-4 a further sum of $1,097.48 being expended. The bracing of the approach was reinforced, the top of the hill leading to the wharf lowered and the stone embankment finished. In 1904-5, slight damages to the piles, by ice, called for repairs amounting to $119.62.

During spring of 1906, one of the ice piers was broken up. A close-faced cribwork ice-breaker, measuring 30 feet 5 inches at bottom, 7 feet by 15 feet at top, with all sides inclined 1 in 12 except the upstream face which is inclined 1½ in 1, and 16 feet 8 inches high, was substituted. Minor repairs to the wharf proper and to the shed brought the expenditure for the year to $1,951.33.

During April, 1907, half a dozen men were employed for three or four days in cutting a trench through ice from wharf to an island about one mile west of upstream. This is done yearly and has the effect of diverting the ice-shoves from the wharf. Expenditure, $34.75.

WHITE CLOUD ISLAND.

White Cloud island is situated in Georgian bay, on the steamer channel from Wiarton to the 'Soo.'

At the last session of parliament, the sum of $1,000 was appropriated for the construction of a wharf, and, after plans and specifications had been prepared ,a contract was awarded to Messrs. Johnston, Hunter & Crawford, of Wiarton, to perform the work for the sum of $4,000.

Work was commenced on January 14 last and is still in progress; it consists in the construction of a wharf of cribs and spaces, 120 feet long by 20 feet wide, with an 'L' at the outer end, 20 feet wide by 32 feet long, and a stone approach 105 feet long by 25 feet wide on top.

Total expenditure for fiscal year 1907-8, $1,017.20.

WIARTON.

Wiarton is a prosperous town in the county of Bruce, at the head of Colpoy's bay, about 32 miles northwest of Owen Sound. It is the terminus of the Georgian bay and Lake Erie branch of the Grand Trunk Railway.

The sum of $2,550 having been appropriated for the reconstruction of 472 feet of the superstructure of the breakwater, authority was given to proceed with the work by day labour.

It consisted in the reconstruction, in concrete with stone-filling, of the superstructure.

The department decided to do certain dredging, and a contract was awarded on June 29 last to Mr. A. F. Bowman, of Southampton, at the following prices per cubic yard, scow measurement: rock, $2; all other materials, 20c.

Operations were begun on October 12 and closed for the season on January 11; they consisted in dredging approaches to the government breakwater, 550 feet long by 100 feet wide ; the space between the government breakwater and the town wharf, and a basin to the south of the town wharf 370 feet long by 100 feet wide, all to a depth of 16 feet below low water.

The dredge removed some 124,200 cubic yards of clay, sand and gravel.

The expenditure for the last fiscal year was as follows:—

Construction and improvements	$ 2,619 00
Dredging, &c.	25,026 60
Total	$27,645 60

PROVINCE OF MANITOBA.

GIMLI WHARF.

During the season, temporary repairs were made to Gimli wharf, consisting in filling the wharf with boulders, taken up by the clam shell while dredging alongside, and replacing some bad planking.

Total expenditure during last fiscal year, $1,238.05.

LAKE FRANCIS OUTLET.

During the winter, 11 cords of stone-filling were put in the outer end of the dock at St. Laurent as a protection against ice shoves.

The expenditure on account of the above stone-filling was $82.87.

RED RIVER.

Owing to the tendency of the river, during freshet, to cut through the west bank into the Selkirk slough, just below the present government wharf, it was decided to adopt some means of bank protection. A sum of $3,000 was appropriated for this purpose.

This protection work consists of a core of piles driven three feet centres, with a waling and each alternating pile braced into the rear. An earth embankment is carried up to the level of the top of the piles with a top width of 10 feet and back slope of one in two horizontal. The river side of the piles is laid with riprap of large stones. Three different depressions have been filled in which are approximately 90, 190 and 100 feet in length respectively.

Work on this protection started on November 9 and was completed on December 10, with the exception of the stone riprap which was delayed until the winter roads were in condition to permit of teaming.

On February 5, 1908, this work was completed, the total expenditure being $899.73.

SELKIRK, WHARF EXTENSION.

The Selkirk wharf extension of 222 lineal feet was completed in the month of March of the last fiscal year. Some repairs to a portion of the coping, carried away by the ice in the spring, were necessary.

During May, dredge *Crane* excavated material from the front of the dock and this was afterwards filled in back of the dock.

Owing to the dangerous condition of the planking of the old dock, north of the present extension, it was renewed in November, and, to strengthen this planking, intermediate stringers of Douglas fir, 8 by 8-inch on 20 feet, were put in.

Expenditure during last fiscal year, including dredging, construction and improvements, $4,049.63.

THE SLOUGH.

A new storehouse, 60 by 30 feet, for the dredging fleet at Selkirk, was erected during January. This storehouse has been found a great convenience in storing equipment, stives, &c., for the various dredges and boats.

ST. ANDREWS RAPIDS, LOCK AND DAM.

Since April 1, 1907, the work has been carried on in the following order:—

Construction of Lock and Approaches.

During the period of April up to the 17th, 400 cubic yards of earth and 40 cubic yards of rock were removed from the lock-pit foundations. The method used by the contractors in removing this material was by means of cableway and skips, the earth excavation being used in making up the cofferdam to be used later on in unwatering the foundations of the dam.

The spring freshet occurred in April, and on the 17th of that month, the lock-pit was flooded out and work discontinued until May 3, when excavation was again resumed.

During the interval of the freshet, the development of the system adopted for concrete work was attended to. Supply tracks were put down from the gravel, sand and crushed stone piles, to the storage bins of the concrete mixing plant. A Gates stone-crusher was erected and, between April 17 and May 9, a total quantity of 2,100 cubic yards of granite was crushed to a size passing through a 1½-inch ring. This crushed granite was, later, used for first-class concrete, run of crusher being used.

After considerable delay, caused by the difficulty in getting steel, the contractors finally completed the laying of the spur track from the main line of the Canadian

Pacific Railway, to the work, on June 18. The first cars of cement arrived on June 12 and it was necessary to team this first shipment to the storage sheds.

Unwatering of the lock-pit was started on May 1 and the work of excavation in preparing the foundations of the lock was resumed on May 4. The earth excavation in the lock-pit was completed on June 8, and rock excavation continued in advance of the laying of concrete, and was completed on July 25.

Earth excavation in the upper entrance to the canal was sublet and, from May 1 to October 31, a total of 34,500 cubic yards in this portion of the canal was removed by the drag and wheeled scrapers. This material was spoiled on the west side of the prism and forms part of a scheme of grading and sloping which will eventually give a finished appearance to the work.

Underlying the earth in the upper entrance, a bed of gravel has been encountered which, after being washed, will be suitable for use in making concrete. A rather ingenious gravel washing plant has been devised by the contractors and used with considerable success.

Actual concrete construction was started on June 22, 75 cubic yards being put in on that day.

The following scheme of operation and method of work was followed by the contractors. Concreting was started at the upper end of the lock, a guy derrick having been erected on the centre line, and just above the lock. The foundations, for a distance of about 50 feet, were then built, together with the coffer wall at the upper end of the lock, the breast wall, and the first two sections of the lock walls, one on each side. The foundations of the lock were then carried down to the lower end of the lock. A double travelling derrick was then erected in the lock chamber, and concrete work was placed on both sides simultaneously, the lock walls being built in sections varying in length from 30 to 55 feet. In each expansion joint, between sections, was placed a stop water-check of two pieces of spruce with oak key. Work was carried on continuously in each section until completion. The forms consisted of 2-inch shiplap, surfaced one side and 6 by 6-inch studding.

No difficulty was experienced in keeping good alignment and it is interesting to note that at no time was any exterior bracing used for forms. All the forms were tied into the body of the wall by means of iron wire and bolts through the studding. These bolts had a special form of nut with lugs for attaching to wire, the bolt being afterwards withdrawn, thus doing away with any labour of cutting out bolts or wire from the finished surface. A wet concrete was used and the only means adopted in giving a finished surface in the depositing of the concrete was to keep one man spading back stone from the face of the moulds. On the removal of forms and while the concrete was still damp, a surfacing was given the concrete in the shape of a wash of one part cement to two sand, of the consistency of a thick paint, applied with a plasterer's brush. The result obtained in the general appearance of all finished surfaces is gratifying, in view of the fact that it has been obtained at very little expense.

A general description of the concrete mixing plant and laying of concrete may be of interest.

The storage bins, four in number, were built alongside of the head tower of the cableway, on the west side and about opposite the centre of the lock. These bins are for gravel and sand, crushed granite, crushed limestone and sand. On the top, is the loading platform from which a track with switch and tracks to the sand, gravel and crushed granite piles lead. The gravel and sand was loaded into four yard side dump-cars by means of a steam shovel. Cars from the crushed granite pile were loaded by hand. The cars were dumped into their respective bins. The rock crusher was installed alongside of the storage bins and limestone, from the east bank of the canal, was transported to the crusher by means of dump carts. An elevator conveyed the crushed limestone to the storage bin for that material.

A battery of concrete mixers consisting of a Smith and a Ransome mixer were erected at the base of the storage bins and the materials from the separate bins were released and measured in hoppers before letting into the mixers. The cement from the storage shed was conveyed to the mixer by carts. A water tank with automatic float gauge gave the necessary supply of water. The mixing was always in sight of the operators and samples were gathered occasionally of the mixture, and tests made in the laboratory on the work. The result of the only series of long time tests which are available up to the present, are exceedingly interesting when taken into comparison with laboratory tests made with standard quartz, and are as follows :—

Tensile Tests.

Cement.	Test.	7 days.	28 days.	3 months.
Samson	1 cement 3 standard quartz	165	228	311
Samson	From mixers :— 1 cement 3 sand and very fine gravel	227	319	428

The mean of three briquettes is taken. The samples from mixer are as the batches went into the work, the only care taken being to reject coarse stone and gravel.

It will be noted that the above tests show that a mixture of the same proportions taken from the mixers give far better results than the laboratory one of mixing with the standard quartz.

Concrete from the mixers was taken away in cars to the west bank of the lock and these cars were dumped into chutes and the concrete deposited into concrete buckets at the bottom of the lock. Contents of these buckets were then deposited in their proper place by means of the travelling derrick. The chutes mentioned above were set at such an angle that no disintegration of the mass followed.

The first concrete was put in the work on June 22 and the lock was completed on October 15, during which time 17,032 cubic yards were laid.

The output per month was :

June 17 to 30	750	cubic yards.
July	4,750	"
August	5,200	"
September	4,400	"
October to 15th	1,938	"
	17,038	cubic yards.

The amount of each class was :

First class	4,250	cubic yards.
Second class	12,788	"

During the month of November, a cut-off wall, at the upper west end of the lock, was constructed and in this 173 cubic yards of concrete was used. As a general rule, the proportions of the concrete entering into the construction of the lock will approximate 1 cement, 3 sand and 5 gravel and broken stone. The amount of cement entering into 1 cubic yard of concrete was 1½ barrels.

Construction of Dam.

During the summer of 1907, a cofferdam was constructed for unwatering the western end, extending 320 feet from the east wall of the lock.

The cofferdam consists of open-face cribwork of round timber filled in with earth and stone, from excavation of the lock, with close sheet-piling on the outer faces and ends.

Owing to the difficulties anticipated in connection with the laying of a granite coping of the dam, the shortness of the summer working season and representations made by the Winnipeg board of trade to the effect that an early completion of the St. Andrew's lock and dam would be of great benefit to the city of Winnipeg, it was decided, early in October last, to make changes in the projected plans, eliminating the granite-facing of the dam, substituting concrete therefor, thus enabling the construction of the dam to be undertaken during the winter. This winter work has necessitated making extensive provision for the housing in and heating of the concrete-mixing plant and portion of the dam under construction.

Excavation for the foundation of the dam was begun on October 1, and was completed by March 11, the work being carried on in advance of each section of concrete work. The amount of material removed consisted of 6,000 cubic yards of earth and 825 cubic yards of rock.

A satisfactory foundation bed of rock, firm and free from seams or springs, was obtained at about elevation 670·5, the original rock surface being generally elevation 673·5.

Very little trouble was encountered from water during the construction of the dam, this being handled during the early part of the winter by 8 and 4-inch centrifugal pumps.. From February 1 to the completion of the work, a 4-inch pump handled all water coming in.

All concrete-mixing plant, consisting of concrete mixers, storage bins, tramways and power plant, was inclosed and kept heated. The tramway leading from mixers, across the lock to the dam, was inclosed and heated, and the successive portions of the dam were housed in and heated. The temperature was at all times kept above freezing, the average temperature being about 48 degrees Fah.

The 320 feet in length of the dam was built in four sections, and while one section was being prepared for concrete, the preceding section was being built. Concreting was started in the first section on January 9 and on March 26 the last section was completed. The amount of concrete laid was 8,550 cubic yards.

The general body of the dam consists of a gravel concrete, made up of gravel, 22 cubic feet; crushed stone, 12 cubic feet, and 5 bags of cement. This batch gave from 28 to 30 cubic feet of concrete.

Surfacing, for a depth of one foot and a half, consists of crushed granite, 21 cubic feet; sand, 12 cubic feet, and cement, 5 bags. The gravel came from the heated bin, well thawed out, and when mixed with the cold stone and hot water, went into the work at an average temperature of 55 degrees, and after being in place about five days the temperature was found to have raised to 78 degrees Fah., and then gradually fell.

Fifty-seven large steel step-castings have been embedded in the dam, which will form the rest for bottom of movable frames.

Besides the construction of the dam, the foundations, for a portion of the lower west extension wall to the lock, have been prepared and concrete put in on March 30 last. The intention is to complete 100 feet of this wall before the freshet.

During the last winter, the contractors have hauled to the site of the work some 22,000 cubic yards of gravel, and there remains 17,000 cubic yards for the coming

season's work. The gravel used has all been hauled from a pit, about four miles distant, and is loaded into sleighs by a steam shovel.

During the fiscal year ended March 31, 1908, the expenditure amounted to $261,-613.95.

NORTHWEST TERRITORIES.

LESSER SLAVE RIVER WORK.

In order to effectively render navigable, for small draft vessels, the Lesser Slave river rapids by confining the water to one channel, thus insuring the greatest efficiency, the timber required for the dams was cut and skidded along the river banks where the dams were to be built and a quantity of stone piled up at available points to be used as ballast, riprap, &c.

The style adopted in the construction of the dams has been mostly round timber cribwork, 6 to 10 feet in width and 1 to 4 feet in height, drift-bolted, with ties generally six feet apart. Piles were also driven along under the dams where required to insure stability of the work.

Twenty-six dams were built, varying in length from 50 to 250 feet. Owing to the quantity of stones, boulders, bars, &c., that were met with, it has been found necessary, in the interest of the work, to build a scow and erect upon it a slewing derrick, with 22½-yard three-leaves, orange-peel bucket, as well as boulder tongs, worked by a four-drum 20 h.p. stone hoist. Material cut and delivered and everything in good working order.

The amount expended to March 31 last is $34,998.66.

BRITISH COLUMBIA.

CLAYOQUOT WHARF.

This wharf is situated on Clayoquot Sound on the west coast of Vancouver Island, and is near the post office and government telegraph station. The appropriation was not sufficient to complete the work.

Total expenditure, $1,999.90.

COLUMBIA RIVER GENERALLY.

The appropriation of $30,000 for this service was expended at the following places:—

(*a*) Columbia river above Golden.

The tug *Muskrat* was employed on this portion of the river in removing snags from the channel, and sweepers from the banks from May 25 to June 22, and on June 29 the crew was paid off. On August 1, when high water was over, the boat was again put in commission and proceeded up river to Red Rock where a dam was built 168 feet long. Some repairs were also made to the dam between Athalmer and Golden, and some sweepers which had fallen into the river during the freshet were cut away.

The total expenditure on this work was $3,114.90.

(*b*) Columbia river at Revelstoke.

The work done under this heading consisted in repairing the damage done to the dam by the ice jam in April. Cribbing, filled with rock, was built for a distance of about 200 feet to strengthen a part of the dam that had been forced out of alignment and otherwise damaged by the ice. A large quantity of rock was filled into the part remaining beyond the break and some mattressing was done on the gravel bar at the

lower or west end of the dam. The east end of the dam, for a distance of 204 feet, was raised 18 feet above low water mark to prevent erosion of the bank during high water. Work had to be suspended on May 24 on account of high water.

The dredge *Nakusp* was employed on this service until June 21, when, after a serious accident, she was tied up.

The work of repairing the dam was resumed on January 18 last and was completed on March 21. The east end of the dam was then raised 18 feet above low water mark, for a distance of 144 feet, in addition to the 204 feet built during the spring of 1907.

The total expenditure was $35,943.64; Columbia river above Golden, $3,114.90; total, $39,058.54.

COQUITLAM RIVER.

The work done under this service consisted in removing and burning snags, &c., which were blocking the channel of the river and obstructing the passage of saw-logs and shingle bolts which are brought down the river during high water.

The expenditure was $987.78.

COURTNEY RIVER.

The expenditure on this river has been confined to repairing a break that occurred in an uncompleted portion of the bank protection, caused by the continued impact of heavy logs which come down the river during the freshet.

The expenditure was $1,456.50.

FRASER RIVER.

The expenditure under this heading was confined to repairs to Nicomen Dam No. 4 and to the dam on the Sand Heads, one mile below Garry Point, at the mouth of the river. Some 8,370 tons of broken rock was used to reinforce this latter dam.

The balance of the expenditure was incurred in building a wharf and storehouse at Sapperton for the dredge *King Edward,* erecting a pile platform to store pipe upon, when not in use, and the completion of the wing dam at Annieville Bar.

The total expenditure was $27,178.12.

FRASER RIVER, COTTONWOOD CANYON.

This work consisted in removing dangerous reefs and points of rock in Cottonwood canyon, also in blasting out a trail a short distance above high water mark, through the canyon, to enable lines to be carried by the crews of steamers, which, at certain stages of the water, have to warp themselves, as well as to facilitate the work of hauling canoes and scows through, there being a great deal of this kind of traffic on the river.

Work was commenced about September 8 and was closed down on October 10. It was resumed about November 20. By the middle of January, all the work that could be done until the water got lower had been finished and work was suspended until March 1, when the water was at a more favourable stage, and it continued to get lower until the middle of April when the work was completed. By the removal of the large reef in the centre of the canyon, since the end of the fiscal year, navigation has been opened through the Cottonwood canyon as far as Fort George canyon, so it has been demonstrated that work done in the canyon has been a great benefit to navigation on that part of the river, making it possible to take a steamer from Soda Creek to Fort George canyon, a distance of 140 miles.

Total expenditure, $10,628.34.

FRASER RIVER WHARFS.

Three wharfs were built under this appropriation: one at McAdam's Landing, 12 miles above New Westminster; one at Glen Valley, 22 miles above New Westminster, and one at Riverside, Matsqui, about 32 miles above New Westminster.

The cost was as follows:—

McAdam's landing	wharf	$1,565 00
Glen Valley	"	2,203 02
Riverside	"	2,685 00
		$6,453 02

The balance of this appropriation was intended to cover the purchase of the Port Haney wharf. Owing to the owner wishing to reserve a part of the wharf, the purchase was delayed.

KOOTENAY RIVER.

During the months of January and February last, a force of men was employed in removing boulders from the channel of the Kootenay river, from opposite Proctor, downstream for about two miles. The plant used consisted of a scow, hoisting engine, and small tug-boat. The boulders were hoisted into the scow and towed out to deep water where they were thrown overboard. Those which were too large to be hoisted out were first broken up with powder. In all, 639 boulders were removed, 286 of which required blasting.

The total expenditure was $2,425.02.

QUATSINO WHARF.

This wharf is situated on Quatsino Sound, on the west coast of Vancouver Island, and is for the convenience of a small settlement and post office on the north shore of the sound, some forty miles from the entrance. The expenditure only represents the commencement of the work, the present appropriation not being sufficient to complete the work. The piles, &c., have all been driven.

Total expenditure, $1,140.42.

SALMON ARM WHARF.

This work was commenced on July 22 last and continued without any serious interruption until September 21, when the appropriation was exhausted. The main wharf is 60 feet long by 40 feet wide and the approach is 760 feet long by 16 feet wide. Some dredging is necessary at the approach to the wharf and dolphins are required at each end.

The expenditure was, $4,808.66.

SKEENA RIVER.

The work done under this service consisted in the removal of snags, &c., from the fishing grounds at the mouth of the Skeena river. This was done with the snag scow which has been in commission for the past seven or eight years. The new snag boat which was under construction for this purpose was unfortunately delayed on account of the non-completion of the boiler, but it eventually got up to the Skeena and was put to work there on May 1, 1908.

Some work was done up river in Kitsilas canyon, which consisted in putting in ring bolts, 50 in all, along both sides of the canyon to assist the steamers in running lines when going up or in case of an accident, which happened last year to the steamer *Mount Royal* and she was totally wrecked there.

The permanent cables were also laid, one at Devil's Elbow and the other at Hardscrabble Bar. These were purchased by the government and put in place by the Hudson Bay Company's steamer on her first trip up the river this spring.

The expenditure was $5,347.61.

SOUTH THOMPSON RIVER.

From June to October, a small force was employed at Kamloops in constructing a dredge for work on the Thompson river and at other points accessible by water. The hull of the dredge is 58 feet long, 24 feet wide, and 3 feet 4 inches deep. She is not self-propelling. She is of the orange-peel bucket type and performs very well the work she is called upon to do. A small scow 50 feet long, 16 feet wide and 3 feet 4 inches deep, was also built to carry wood, &c., to the dredge.

About the end of November the dredge was tied up for the winter after doing some work in the river at Kamloops for the city authorities.

The expenditure was $4,296.63.

WILLIAMS HEAD QUARANTINE STATION.

The expenditure on this service has been made in repairs to the large wharf. Some work has been done on the roads, in the grounds and on the trail leading to the lake, where the water supply is obtained for the station.

The small wharf was repaired and extended, to accommodate the new quarantine steamer *Madge* which is considerably larger than the old boat the *Earl*.

The total expenditure was $9,961.97.

WOODS AND LONG LAKES CANAL.

This work was commenced on October 1. The distance across the neck of land separating the two lakes is 640 feet, and the difference in level is 2·5 feet, Woods lake being the higher. For about half the distance from Long lake the ground was easy to handle with a scraper; the balance was a mixture of gravel and clay, and before being cleared was covered with a dense growth of willow, alder and other brush. There was also a large number of fir trees which had to be grubbed out.

As it was found that the *Stanley* scraper, which had been used, could not touch the stratum of stiff clay encountered at a depth of two feet below the level of Long lake, a small dredging plant was ordered to complete the excavation to the required depth of four feet below the low water level of Long lake. This dredging plant is on the ground and will be placed on a scow, which was built last winter, as soon as the bridge across the canal is completed.

When finished, the channel will be 640 feet long and four feet deep at low water. The main span of the bridge will be 40 feet long and 20 feet clear above water level.

Total expenditure, $4,999.23.

DREDGING OPERATIONS.

During the fiscal year 1907-8, dredging was performed in the following places:—

PROVINCE OF NOVA SCOTIA.

Acadia Coal Company piers, Pictou, Pictou county.
Bridgewater, La Have river, Lunenburg county.
Copper Smelting Works, Pictou harbour, Pictou county.
Dominion Coal Co. piers, Louisburg, Cape Breton county.
Dominion Coal Co., piers, Glace bay, Cape Breton county.
Intercolonial pier, Sydney, Cape Breton county.
Magdalen Island Cold Storage Co., Pictou, Pictou county.
New Glasgow shipyard, Pictou county.
Pictou bar, Pictou county.
Port Mulgrave, Pirate Cove, Guysborough county.
Port Morien (Cow Bay), Cape Breton county.
Steel and Coal Co. pier, Sydney, Cape Breton county.
Whitney pier, Sydney, Cape Breton county.
Windsor government pier, Avon river, Hants county.
Yarmouth channel, Yarmouth county.

PROVINCE OF NEW BRUNSWICK.

Belle Isle channel and wharf, Kings county.
Campbellton, channel and wharfs, Restigouche county.
Cushing's Mills, St. John county.
Loggieville wharfs, Northumberland county.
Navy island bar, St. John harbour, St. John county.
Oromocto shoal, Sunbury county.
St. Andrew's channel, Charlotte county.
St. Andrew's wharf, Charlotte county.
Shippigan channel, Gloucester county.
St. John channel, eastern entrance, St. John county.

PROVINCE OF PRINCE EDWARD ISLAND.

Falconwood Asylum wharf, Queens county.
Marine and Fisheries wharf, Charlottetown, Queens county.
Pownal wharf and channel, Queens county.
Souris harbour and wharfs, Kings county.
Victoria (Crapaud) wharfs and channel, Queens county.

PROVINCE OF QUEBEC.

Mission Point, wharf and channel, Bonaventure county.

PROVINCE OF NOVA SCOTIA.

DREDGING AT ACADIA COAL COMPANY PIERS, PICTOU.

Acadia Coal Company piers are situated in Pictou harbour near its entrance. The dredge *St. Lawrence* was employed in deepening the water in front of the piers from May 2 to 6, removing 2,800 cubic yards at a cost of 10·321 cents per cubic yard. The dredge *George McKenzie* was employed from May 11 to 13 removing 315 cubic yards rock and sand at a cost of 58·70 cents per cubic yard.

DREDGING AT BRIDGEWATER, LA HAVE RIVER.

The dredge *Northumberland* was engaged from August 25 to December 13, deepening the river channel by removing 327,296 cubic yards of old roots, slabs, edgings, sawdust, sand and mud, at a cost of 05·44 cents per cubic yard.

DREDGING AT COPPER SMELTING WORKS, PICTOU.

The dredge *George McKenzie* was engaged from June 17 to July 2 in improving the depth of water at the wharf of the Copper Smelting Company at Pictou, by removing 3,780 cubic yards of sand at a cost of 23·53 cents per cubic yard.

DREDGING AT DOMINION COAL CO. PIERS, LOUISBURG.

The dredge *Cape Breton* was engaged at the Dominion Coal Company piers at Louisburg from November 14 to December 14, removing 7,560 cubic yards coal, mud and gravel at a cost of 44:20 cents per cubic yard.

DREDGING AT DOMINION COAL CO. PIERS AND CHANNEL, GLACE BAY.

The dredge *Cape Breton* was engaged from August 20 to November 13, removing 34,755 cubic yards of sand, gravel, kelp and coal, from the channel and harbour at Glace Bay at a cost of 26·39 cents per cubic yard.

DREDGING AT INTERCOLONIAL PIER, SYDNEY.

The dredge *Cape Breton* was engaged from May 18 to June 22 removing 20,370 cubic yards mud from in front of the Intercolonial pier and channel, at a cost of 11.26 cents per cubic yard.

DREDGING AT MAGDALEN ISLAND COLD STORAGE, PICTOU.

The dredge *St. Lawrence* was engaged from May 7 to 18 dredging a channel from the harbour channel towards the wharf occupied by the Cold Storage Company, in removing 5,250 cubic yards mud at a cost of 06·611 cents per cubic yard.

DREDGING AT NEW GLASGOW.

The dredge *George Mackenzie* was engaged from May 14 to June 16 in dredging the channel from the bridge at New Glasgow to the shipyard, to enable the builders to launch a steel ship, building there, and removed 4,770 cubic yards mud and gravel to deposit outside Pictou light at a cost of 66·38 cents per cubic yard.

DREDGING AT PICTOU BAR.

The dredge *W. S. Fielding* was engaged from May 10 to September 21 removing 183,150 cubic yards sand and gravel; deepening the channel through the bar to a depth of 25 feet at low water, at a cost of 13·29 cents per cubic yard ; the spoil being

deposited seven miles outside. The dredge *St. Lawrence* was engaged from October 13 to December 31 in further widening the channel and improving the depth of water on the bar by removing 19,950 cubic yards sand and gravel, at a cost of 35·15 cents per cubic yard.

DREDGING AT PORT MULGRAVE, GUYSBOROUGH COUNTY.

The dredge *Geo. McKenzie* was employed at Pirate Cove, Port Mulgrave, Guysborough county, from December 23 to January 31, removing 7,042 cubic yards mud; in improving the depth of water at the wharfs and in the channel, at a cost of 55·45 cents per cubic yard. Considerable damage was done to the plant, owing to ice.

DREDGING AT PORT MORIEN (COW BAY).

The dredge *Cape Breton* was engaged from July 16 to August 19 at Port Morien, removing 33,920 cubic yards stone, gravel, sand and coal, at a cost of 11·78 cents per cubic yard.

DREDGING AT SYDNEY STEEL AND COAL COMPANY'S PIERS.

The dredge *Cape Breton* was employed from June 23 to July 5 at the Sydney Steel and Coal Company's pier, removing 7,980 cubic yards stone, gravel and mud, at a cost of 22·52 cents per cubic yard.

DREDGING AT WHITNEY PIER.

The dredge *Cape Breton* was engaged from May 3 to 17 removing 5,985 cubic yards stone, mud, coal, and gravel at the Whitney pier, Sydney, at a cost of 18·06 cents per cubic yard.

DREDGING AT WINDSOR, HANTS COUNTY.

The dredge *Canada* was engeged at Windsor, Hants county, from April 15 to July 3, removing 10,460 cubic yards mud from in front the public wharf and improving the berths for shipping on the Avon river, at a cost of 62·13 cents per cubic yard.

DREDGING AT YARMOUTH, YARMOUTH COUNTY.

The dredge *Canada* was engaged from April 1 to 14, and from July 4, 1907, to January 29, 1908, removing 84,295 cubic yards mud, and drawing old spiles from the channel in Yarmouth harbour, at a cost of 17·26 cents per cubic yard. The dredge *W. S. Fielding* from November 22, 1907, to February 12, 1908, removed from the channel at Yarmouth, just inside the outer entrance, 33,200 cubic yards stone, gravel and sand, at a cost of 35·83 cents per cubic yard.

PROVINCE OF NEW BRUNSWICK.

DREDGING AT BELLEISLE, KINGS COUNTY.

The dredge *New Brunswick* was engaged from May 14 to October 21 improving the channel in front of the wharf near Hatfield's Point out to deep water, removing 67,750 cubic yards mud, at a cost of 12·32 cents per cubic yard.

DREDGING AT CAMPBELLTON, RESTIGOUCHE COUNTY.

The dredge *St. Lawrence* was engaged from May 19 to August 31, and September 15 to 28, in front of the wharfs at Campbellton, and forming a mooring basin, removing 29,750 cubic yards mud and gravel at a cost of 34·20 cents per cubic yard.

DREDGING AT CUSHING'S MILLS, ST. JOHN COUNTY.

The dredge *New Dominion* was engaged from April 24 to May 31 in deepening the water in the A. Cushing & Co.'s mill ponds, removing 12,300 cubic yards mud and bark at a cost of 8·12 cents per cubic yard. The tug service was supplied by Messrs. A. Cushing & Co.

DREDGING AT LOGGIEVILLE, NORTHUMBERLAND COUNTY.

Contract work by A. and R. Loggie from July 30 to November 27 was performed at Loggieville, removing 13,201 cubic yards at a cost of 35 cents per cubic yard, and inspection 2·02 cents per cubic yard.

DREDGING AT OROMOCTO, SUNBURY COUNTY.

The dredge *New Brunswick* was engaged from October 22 to November 14 improving the depth of water over the Oromocto shoal, in Sunbury county, removing 6,125 cubic yards sand at a cost of 22·83 cents per cubic yard.

DREDGING AT ST. ANDREWS, CHARLOTTE COUNTY.

The dredge *New Dominion* was engaged from June 11 to November 9, removing 45,185 cubic yards clay and boulders, and completing a channel through the shoal at that place, at a cost of 20·24 cents per cubic yard, and from November 10 to February 5 in opening a channel to and dredging the foundation for a public wharf at St. Andrews; 18,387 cubic yards clay, gravel and stone were removed, at a cost of 28 cents per cubic yard; the work is to be completed in the spring.

DREDGING AT SHIPPIGAN, GLOUCESTER COUNTY.

The dredge *George McKenzie* was engaged from July 16 to November 10 improving the channel at Shippigan river, Gloucester county, by removing 24,209 cubic yards mud, at a cost of 49·27 c nts per cubic yard.

DREDGING AT ST. JOHN HARBOUR.

St. John Harbour is the estuary of the river of the same name, a stream 450 miles in length, of which 90 miles are tidal.

The harbour is safe, commodious and accessible; and, in consequence of the great rise and fall of the tide, added to the velocity of the stream, its navigation, even during the winter months, is never impeded by ice.

The commercial part of the harbour, about one mile and a quarter long and half a mile in mean width, is very deep, the water being confined by the configuration of the banks and by the wharfs.

About one mile and a half southward of the city, Partridge island forms a natural protection to the harbour and divides the entrance into east and west channels. In the former or main channel, a minimum navigable depth of 19 feet is found on the bar at ordinary spring tides. Two hundred yards inside the crest of the bar there is a depth of five fathoms in the narrow fairway, while higher up between the principal wharfs, on either side of the harbour, 12 fathoms are given in mid-channel.

On September 30, 1905, a contract was let for the excavation of a portion of Sand Point slip to a depth of 30 feet below low water, in order that the corporation of St. John might provide a new berth for the winter port traffic. During the last fiscal year, 427,714 cubic yards of material were dredged.

The city corporation having decided to continue the wharf extension on what is known as the '600 and 400-foot extensions,' dredging operations were started on April

24, 1907, to permit the sinking of new cribs and to provide a suitable depth of water alongside of proposed construction; up to March 31, 1908, 468,609 cubic yards of material had been removed.

With a view to facilitate the docking of large steamers in the Intercolonial Railway west berth, the whole area, except the upper end of the berth, was dredged to a depth of 28 feet at low water, ordinary spring tides.

Dredging was also performed by the departmental dredge *W. S. Fielding* at the outer entrance to St. John harbour channel from February 25 to March 31, during which time 13,450 cubic yards of gravel, stone, sand and mud were removed, at a cost of 42·63 cents per cubic yard.

The dredge *New Dominion* was engaged from April 1 to 23, dredging the end of Navy island at the west entrance to the ferry slip, and removing 5,200 cubic yards, at a cost of 23·16 cents per cubic yard.

PROVINCE OF PRINCE EDWARD ISLAND.

DREDGING AT FALCONWOOD ASYLUM WHARF, QUEENS COUNTY.

From May 10 to 26 the dredge *Prince Edward* was engaged at the Falconwood Asylum wharf, removing 2,790 cubic yards mud at a cost of 46·69 cents per cubic yard, completing the work.

DREDGING AT MARINE AND FISHERIES WHARFS, CHARLOTTETOWN, QUEENS COUNTY.

From November 3 to December 26 the dredge *Prince Edward* was engaged at the Marine and Fisheries wharfs, Charlottetown, improving the depth of water by removing 11,610 cubic yards of mud at a cost of 34·53 cents per cubic yard.

DREDGING AT POWNAL, QUEENS COUNTY.

From May 27 to August 28 the dredge *Prince Edward* was engaged improving the channel to and at the wharf at Pownal bay, removing 24,525 cubic yards of mud at a cost of 22·98 cents per cubic yard.

DREDGING AT SOURIS, KINGS COUNTY.

From May 23 to October 7, and from November 1 to December 21, the dredge *Montague* was engaged improving the harbour at Souris, by removing 50,750 cubic yards mud, stone, gravel, old trees and timbers, at a cost of 32·04 cents per cubic yard.

DREDGING AT VICTORIA (CRAPAUD), QUEENS COUNTY.

From August 29 to November 2 the dredge *Prince Edward* was engaged at Victoria (Crapaud), in improving the channel and at the wharfs, by removing 11,065 cubic yards mud, sand and gravel, at a cost of 47·84 cents per cubic yard.

PROVINCE OF QUEBEC.

DREDGING AT MISSION POINT, RESTIGOUCHE RIVER.

From September 1 to 14 and from September 29 to October 12, the dredge *St. Lawrence* was engaged improving the channel and near the wharfs at Mission Point, Bonaventure county, removing 7,560 cubic yards sand, gravel, mud and old trees, at a cost of 38·70 cents per cubic yard.

DREDGING PLANT.

The following is a summary description of the dredging plant owned and operated by the Public Works Department in the maritime provinces:—

The Self-propelling Elevator Dredge 'Canada' (iron hull).

Length over all, 130 feet.
Beam, 20 feet.
Draft when loaded aft, 11·5 feet.
Draft when loaded forward, 7 feet.
Least working depth, 7 feet.
Greatest working depth (ladder, 24 buckets), 16 feet.
Capacity of hopper for spoil material, 90 cubic yards.
Speed when light and newly painted, 6 to 7 miles per hour.
Speed when loaded, 3 to 4 miles per hour.
Daily rate of dredging in hard bottom, 180 to 270 cubic yards.
" " with ordinary digging, 180 to 360 cubic yards.
" " in soft material, 360 to 450 cubic yards.
" " using barges to remove spoil, 600 to 1,000 yards.
Number of steel barges used, two.

The Spoon Dredge 'New Dominion' (wooden hull).

Length over all, 90 feet.
Width, 28 feet.
Draft, 5½ feet.
Greatest working depth, 21 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " with ordinary material, 450 cubic yards.
" " on soft material, 600 to 700 cubic yards.
Number of dump scows or barges used, two.

The Self-propelling Elevator Dredge 'St. Lawrence' (iron hull).

Length over all, 175 feet.
Beam, 30 feet.
Draft when loaded aft, 13·5 feet.
Draft when loaded forward, 8·5 feet.
Least working depth (ladder with 32 buckets dropped 30 feet from bow), 8·5 feet.
Greatest working depth (bucket ladder dropped 40 feet from bow), 28 feet.
Capacity of hopper for spoil material, 350 cubic yards.
Speed when light, 6 to 7 miles per hour.
Speed when loaded, 3 to 4 miles per hour.
Daily rate of dredging hard material, 350 to 700 cubic yards.
" " ordinary earth, 700 to 1,000 cubic yards.
" " soft material, 1,050 to 1,400 cubic yards.
" " using barges to remove spoil, 1,200 to 1,600 cubic yards.
Number of steel barges used, three.

The Spoon Dredge 'Prince Edward' (wooden hull).

Length over all, 80 feet.
Width, 28 feet.
Draft, 6 feet.
Greatest working depth, 21 feet.

Daily rate of dredging in hard material, 300 cubic yards.
" " with ordinary material, 500 cubic yards.
" " in soft material, 600 to 700 cubic yards.
Number of dump scows or barges used, three.

The Spoon or Dipper Dredge 'Geo. McKenzie' (wooden hull).

Length, 90 feet.
Width, 28 feet.
Draft, 6 feet.
Greatest working depth, 22 feet.
Daily rate of dredging in hard material, 350 cubic yards.
" " in ordinary material, 500 cubic yards.
" " in soft material, 600 cubic yards.
Number of dump scows or barges used, two.

The Boom and Dipper Dredge 'Cape Breton' (steel hull).

Length, 91 feet.
Beam, 36 feet.
Draft, 7½ feet.
Greatest working depth, 34 feet.
Daily rate of dredging in hard material, 1,000 cubic yards.
" " in ordinary material, 1,500 cubic yards.
" " in soft material, 2,000 cubic yards.
Number of barges used (each of 200 yards capacity, steel), three.

The Clam Shell Dredge 'New Brunswick' (wooden hull).

Length over all, 90 feet.
Width, 25 feet.
Draft, 2½ feet.
Greatest working depth, 17 feet.
Daily rate of dredging in hard material, 180 cubic yards.
" " in ordinary material, 300 cubic yards.
" " in soft material, 450 cubic yards.
Number of decked scows used, three as at present, and two bottom dumping scows.

The Self-propelling Elevator and Sand Pump Dredge 'W. S. Fielding' (steel hull).

Length over all, 247 feet.
Width over all, 42 feet.
Draft when loaded aft, 19 feet.
Greatest working depth, 61 feet.
Capacity of hoppers for spoil, 1,000 cubic yards.
Speed when light, 7 miles per hour.
Speed when loaded, 4 miles per hour.
Daily rate of dredging, 2,000 cubic yards with buckets.
" " 1,000 cubic yards with sand pump.
" " using barge to remove spoil, 1,000 to 4,000 cubic yards.
Number of steel barges used, four.

The Spoon Dredge 'Montague' (steel hull).

Length over all, 90 feet.
Width, 37 feet 8 inches.
Draft, 5 feet 6 inches.

Greatest working depth, 28 feet.
Daily rate of dredging, 10 hours 1,000 cubic yards.
Number of barges used, two, 72 feet long, 19 feet 8 inches wide, depth, 7 feet.

The Sand Pump Dredge 'Northumberland' (steel hull).

Length, 130 feet.
Agitator, 65 feet.
Width, 52 feet.
Draft, 7 feet.
Working depth, 40 feet.
Daily working capacity, 2,000 to 4,000 cubic yards in 10 hours.
Number of steel barges used, two.

Tug 'Cricket.'

Length, 36·5 feet.
Beam, 7·3 feet.
Draft, 3·10 feet.
Horse power, 4.

Tug 'Rona.'

Length, 85 feet.
Beam, 19·3 feet.
Draft, 8 feet.
Horse-power, 25.

Tug 'Helena.'

Length, 111 feet.
Beam, 23 feet.
Hold, 13 feet.
Horse-power, 87.

One pile driver, engine and boiler fitted on scow.

One stone lifter, engine and large grips (no boiler).

There are two (2) steel hopper barges of 200 cubic yards capacity under contract for the dredges in the maritime provinces.

MEMORANDUM of Quantities removed by the several dredges in the maritime provinces, &c., during the fiscal year 1907-8.

	Cubic yards.
St. Lawrence	65,310
Canada	94,755
New Dominion	81,072
Prince Edward	49,990
Geo. McKenzie	40,116
Cape Breton	110,750
New Brunswick	73,875
W. S. Fielding	229,800
Montague	50,750
Northumberland	327,296
Contract dredge	13,201
	1,136,735

CLASSIFICATION of Disbursements of the Dredges in the Maritime Provinces during the Year ending March 31, 1908.

DREDGE 'CANADA.'

ITEMS.	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Grand Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	548 63	761 88	843 72	602 96	544 80	510 84	566 48	564 25	587 33	683 58	446 93	334 33	6,995 73
Coal	206 96	102 08	124 93	181 62	194 77	197 41	200 81	248 15	217 45	149 98	5 19	.....	1,829 38
Provisions	170 14	206 16	216 80	195 99	242 53	209 57	249 97	260 20	167 02	258 48	168 62	4 65	2,350 13
Stores	51 88	22 06	12 60	8 03	98 61	17 58	46 86	40 37	13 24	87 37	55 28	12 28	466 18
Equipment	.....	.....	.....	74 42	.....	59 25	.....	326 27	.....	.....	48 16	.....	508 10
Water	14 15	9 60	.....	16 30	2 00	.....	.....	.....	.....	.....	.....	.....	42 05
Repairs	6 08	156 62	.....	13 70	82 57	216 42	2 50	244 89	9 72	522 55	.....	.....	1,255 05
Pilotage	5 72	54 00	50 00	39 45	.....	50 00	.....	32 60	.....	.....	.....	.....	231 17
Towage	60 00	.....	.....	2,580 00	675 00	604 00	659 00	661 50	.....	1,262 50	.....	.....	6,502 00
Contingencies	8 99	3 00	17 92	49 93	2 12	2 23	1 30	1 19	.....	2 95	7 59	3 06	100 28
Totals	1,072 55	1,315 40	1,265 97	3,762 40	1,842 40	1,867 33	1,726 94	2,378 82	994 76	2,967 41	731 77	354 32	20,280 07
Working expenses	1,066 47	1,158 78	1,265 97	3,669 78	1,759 83	1,650 91	1,724 44	2,133 93	985 04	2,411 86	318 84	334 33	18,513 18
Repairs, ordinary	6 08	Nil.	Nil.	Nil.	Nil.	59 71	2 50	57 88	Nil.	Nil.	Nil.	Nil.	126 17
" extraordinary	Nil.	156 62	Nil.	92 62	82 57	156 71	Nil.	187 01	9 72	522 55	412 93	19 99	1,640 72
Totals	1,072 55	1,315 40	1,265 97	3,762 40	1,842 40	1,867 33	1,726 94	2,378 82	994 76	2,967 41	731 77	354 32	20,280 07

'NEW DOMINION.'

Wages	668 47	587 68	495 70	417 15	433 96	380 75	388 50	390 47	402 81	415 00	419 02	458 73	5,458 24
Coal	123 93	....	31 96	.....	.....	436 39	.....	20 00	.....	301 92	.....	.....	914 20
Provisions	147 71	74 58	104 47	81 92	95 81	89 49	88 84	100 68	85 06	81 16	42 25	.....	991 97
Stores	29 41	37 82	82 00	2 85	18 15	15 17	7 92	6 40	3 99	.....	.....	7 65	205 36
Equipment	.....	.....	7 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	7 50
Water	29 26	.....	9 13	.....	.....	.....	.....	.....	.....	.....	.....	.....	38 39
Repairs	98 57	120 60	423 80	.....	175 97	23 04	41 98	30 77	.....	85 63	.....	.....	1,000 36
Pilotage	.....	.....	25 00	.....	.....	.....	.....	.....	.....	.....	25 00	.....	50 00
Towage	591 50	20 00	540 00	780 00	911 42	675 00	817 50	780 00	776 56	786 00	510 00	1 50	7,192 48
Contingencies	1 52	.....	3 46	0 83	.....	2 03	.....	2 59	1 03	3 11	14 73	7 85	37 15
Totals	1,693 37	840 68	1,723 02	1,282 75	1,635 31	1,621 87	1,344 74	1,324 91	1,269 45	1,672 82	1,011 00	475 73	15,895 65
Working expenses	1,308 83	518 33	1,188 37	1,282 75	1,416 34	1,598 83	1,304 76	1,294 14	1,269 45	1,587 19	908 35	195 00	13,872 34
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	2 00	Nil.	Nil.	Nil.	Nil.	0 63	Nil.	Nil.	2 63
" extraordinary	384 54	322 35	534 65	Nil.	216 97	23 04	39 98	30 77	Nil.	85 00	102 65	280 73	2,020 68
Totals	1,693 37	840 68	1,723 02	1,282 75	1,635 31	1,621 87	1,344 74	1,324 91	1,269 45	1,672 82	1,011 00	475 73	15,895 65

'ST. LAWRENCE.'

Wages	414 14	503 01	462 05	504 33	576 07	617 08	545 04	485 76	491 23	456 89	339 44	400 23	5,825 21
Coal	179 03	241 13	401 63	273 00	255 94	233 63	393 75	219 94	256 81	.....	.....	.....	2,454 86
Provisions	140 85	221 54	156 39	234 81	240 95	234 62	269 82	211 06	209 13	110 79	.....	15 59	2,045 55
Stores	46 89	26 24	28 55	30 00	.....	43 46	.....	2 67	3 99	37 33	.....	20 65	239 78
Equipment	.....	.....	656 28	475 60	.....	.....	600 88	.....	.....	.....	.....	.....	1,732 76
Water	.....	7 00	8 80	13 90	13 40	13 10	7 70	5 00	.....	.....	.....	.....	68 90
Repairs	.....	.....	270 63	26 50	66 00	191 57	53 37	60 88	15 14	155 67	694 08	.....	1,533 84
Pilotage	.....	134 68	155 00	15 00	.....	.....	50 00	127 00	130 00	.....	.....	.....	641 68
Towage	.....	.....	570 00	930 00	870 00	960 00	1,496 54	.....	.....	420 00	.....	.....	5,246 54
Wharfage	.....	15 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15 00
Contingencies	5 50	21 75	96 31	.....	.....	.....	14 47	.....	13 74	4 96	.....	37 99	194 72
Totals	786 41	1,170 35	2,835 64	2,503 14	2,022 36	2,293 46	3,431 57	1,142 25	1,120 04	1,185 64	1,033 52	474 46	19,998 84
Working expenses	372 27	1,170 35	2,565 01	1,971 04	1,956 36	2,021 04	3,378 20	1,081 37	1,109 90	1,029 97	4 44	412 07	17,072 02
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	66 00	16 00	3 00	28 10	Nil.	155 67	694 08	Nil.	962 85
" extraordinary	414 14	Nil.	270 63	532 10	Nil.	256 42	50 37	32 78	10 14	Nil.	335 00	62 39	1,963 97
Totals	786 41	1,170 35	2,835 64	2,503 14	2,022 36	2,293 46	3,431 57	1,142 25	1,120 04	1,185 64	1,033 52	474 46	19,998 84

CLASSIFICATION of Disbursements of the Dredges in the Maritime Provinces during the Year ending March 31, 1908—*Continued.*

'PRINCE EDWARD.'

ITEMS.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Grand Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	764 89	603 36	416 88	426 50	429 25	415 00	111 73	423 07	422 59	266 38	210 00	427 30	5,246 95
Coal		84 12	313 97		154 58	289 00		181 50	10 60	39 41	73 42	7 95	1,154 55
Provisions		138 66	12 53		338 34	87 28	121 51	125 75		115 95			940 02
Stores		136 49			177 47	5 70	119 64	37 01		63 82	24 69	2 71	567 53
Equipment		27 84					337 12	48 38					413 34
Water		12 01	51 00		88 05	24 00		45 60		38 85			259 51
Repairs		28 72		212 35	2,263 37			59 78		24 09		21 02	1,609 34
Pilotage		8 00								5 00			13 00
Towage			1,160 00	556 25	25 00	675 00	1,200 00	650 00	625 00	75 00			5,266 25
Wharfage						6 42	6 83						13 25
Contingencies		5 25		36 00	51 15	4 07	16 20	2 84	17 99		20 24	8 66	162 40
Totals	764 89	1,044 48	2,254 38	1,231 10	2,527 21	1,506 47	2,243 03	1,573 93	1,076 18	628 50	328 35	467 64	15,646 16
Working expenses	Nil.	820 76	2,254 38	1,018 75	1,263 84	1,506 47	2,243 03	1,514 15	1,076 18	628 50	328 35	Nil.	12,654 41
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	107 14	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	107 14
" extraordinary	764 89	223 72	Nil.	212 35	1,156 23	Nil.	Nil.	59 78	Nil.	Nil.	Nil.	467 64	2,884 61
Totals	764 89	1,044 48	2,254 38	1,213 10	2,527 21	1,506 47	2,243 03	1,573 93	1,076 18	628 50	328 35	467 64	15,646 16

'GEO. McKENZIE.'

Wages	226 97	378 84	380 00	400 22	445 50	432 00	445 50	440 60	377 14	458 57	469 71	738 18	5,193 23
Coal	28 07	34 28	53 00	491 85	539 62		236 40		60 61	79 63	40 95		1,564 41
Provisions	23 58	133 86	94 84	107 12	93 00	105 13	99 85	134 14	78 74	93 17	122 32		1,086 05
Stores	4 92	24 70	7 78	20 76				2 25	4 00		61 83	68 84	195 08
Equipment			569 13	26 50	140 20			81 41	58 91	77 28			953 43
Water		10 00	7 00	26 00		184 50	85 64	45 35					358 49
Repairs		1,443 08			61 06	190 72	65 55		255 40	5 00		288 63	2,309 44
Pilotage										30 00			30 00
Towage			477 50	549 00	1,005 00	154 00			1,449 92				3,635 42
Wharfage		55 00											55 00
Contingencies		38 80		9 40	15 80	1 68	9 34	9 60	4 00	18 77		11 45	118 84
Totals	283 54	2,118 56	1,589 25	1,631 15	2,300 18	1,068 03	942 28	713 35	2,288 72	762 42	694 81	1,107 10	15,499 39
Working expenses	283 54	637 61	1,589 25	1,631 15	2,239 12	877 31	876 73	713 35	2,033 32	757 42	225 10	Nil.	11,863 90
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	61 06	Nil.	65 55	Nil.	Nil.	5 00	Nil.	Nil.	131 61
" extraordinary	Nil.	1,480 95	Nil.	Nil.	Nil.	190 72	Nil.	Nil.	255 40	Nil.	469 71	1,107 10	3,503 88
Totals	283 54	2,118 56	1,589 25	1,631 15	2,300 18	1,068 03	942 28	713 35	2,288 72	762 42	694 81	1,107 10	15,499 39

'CAPE BRETON.'

Wages	471 58	447 26	455 00	503 77	510 25	455 00	452 19	487 36	454 59	355 53	270 00	305 38	5,167 91
Coal		177 00	48 00	48 00	228 57	97 50	51 00	42 75	81 00	39 00			812 82
Provisions	78 55	154 53	82 11	269 28	227 96	207 55	195 42	180 82		299 13			1,695 35
Stores	11 79				17 57								29 36
Equipment			299 30	259 90									559 20
Water					51 75				17 50	12 50			81 75
Repairs		32 48	67 17			1,345 26	20 09	36 07					1,500 98
Towage		10 00	780 00	2,090 00	1,815 00	1,410 00	1,380 00	1,560 00	1,350 00	480 00			10,875 00
Contingencies	8 83		8 80	15 02	20 41	32 37	13 37	40 38	21 48		5 00		165 66
Totals	570 75	821 27	1,740 38	3,185 97	2,871 51	3,547 68	2,111 98	2,347 38	1,924 57	1,186 16	275 00	305 38	20,888 03
Working expenses	570 75	788 79	1,673 21	3,028 07	2,871 51	2,202 42	2,091 98	2,311 31	1,924 57	1,186 16	275 00	305 38	19,229 15
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	20 00	Nil.	Nil.	Nil.	Nil.	Nil.	20 00
" extraordinary	Nil.	32 48	67 17	157 90	Nil.	1,345 26	Nil.	36 07	Nil.	Nil.	Nil.	Nil.	1,638 88
Totals	570 75	821 27	1,740 38	3,185 97	2,871 51	3,547 68	2,111 98	2,347 38	1,924 57	1,186 16	275 00	305 38	20,888 03

CLASSIFICATION of Disbursements of the Dredges in the Maritime Provinces during the Year ending March 31, 1908—*Continued.*

DREDGE 'NEW BRUNSWICK.'

ITEMS.	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Grand Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	371 59	456 13	393 15	339 31	315 00	323 22	340 06	113 48	.....	125 38	147 25	120 00	3,344 57
Coal	.....	100 18	249 19	103 25	259 37	40 00	167 59	.....	.....	.....	.....	.....	919 58
Provisions	.....	169 26	111 66	138 12	133 18	101 52	122 86	52 89	.....	.....	.....	.....	828 69
Stores	17 25	9 56	.....	.....	.....	.....	12 50	29 80	18 96	.....	.....	.....	88 07
Equipment	.....	.....	.....	.....	.....	.....	.....	75 45	.....	.....	.....	.....	75 45
Water	.....	2 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 50
Repairs	237 35	157 28	34 91	.....	3 68	.....	.....	27 79	428 19	37 21	61 50	.....	990 91
Towage	.....	332 07	496 15	.....	906 36	441 84	582 00	367 69	.....	.....	.....	.....	3,126 11
Wharfage	.....	.....	.....	.....	.....	.....	.....	2 00	.....	.....	.....	.....	2 00
Contingencies	.....	.....	1 03	.....	.....	1 85	1 55	2 90	.....	.....	.....	5 87	13 20
Totals	626 19	1,226 98	1,285 49	580 68	1,617 59	908 23	1,226 56	972 00	447 15	162 59	211 75	125 87	9,391 08
Working expenses	137 25	885 89	1,197 43	580 68	1,613 91	908 23	1,226 56	780 08	18 96	Nil.	Nil.	5 87	7,354 86
Repairs, ordinary	3 00	Nil.	Nil.	Nil.	3 68	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	6 68
" extraordinary	485 94	341 09	88 06	Nil.	Nil.	Nil.	Nil.	191 92	428 19	162 59	211 75	120 00	2,029 51
Totals	626 19	1,226 98	1,285 49	580 68	1,617 59	908 23	1,226 56	972 00	447 15	162 59	211 75	125 87	9,391 08

DREDGE 'W. S. FIELDING.'

Wages	583 11	908 36	920 15	927 37	1,097 94	948 86	818 23	904 87	991 01	1,213 37	1,041 52	1,021 01	11,375 80
Coal		564 00	519 19	414 38	585 00	464 25		761 62	329 60	794 66	641 24		5,073 94
Provisions	136 46	247 03	244 25	368 17	267 35	369 02		474 95	270 66	323 92	305 51	142 84	3,150 16
Stores		181 91	44 52	13 43	97 88	137 95	22 35	46 79	15 43	232 63	33 06		825 95
Equipment	162 47			165 71			55 79	25 91	241 06	317 41	9 78		978 13
Water							146 00	4 68					150 68
Repairs	828 18	260 05	178 40	63 50	182 23	58 32	2,576 52	5,901 46	107 72	732 00	6 43	536 60	11,431 41
Pilotage		120 00	125 00	135 00		129 40		112 00	130 00		120 00	130 00	1,001 40
Towage		480 00	1,050 00	750 00	810 00	512 00		277 00	935 00	650 00		400 00	5,864 00
Wharfage						16 94					408 00		424 91
Contingencies		37 73		4 67	9 44	9 57	7 41	19 26		34 18	35 56	4 00	161 82
Totals	1,710 22	2,799 08	3,081 51	2,842 23	3,049 84	2,646 31	3,626 30	8,528 54	3,020 48	4,298 17	2,601 10	2,234 45	40,438 23
Working expenses	855 54	2,539 03	2,903 11	2,778 73	2,867 61	2,587 99	1,049 78	2,627 08	2,912 76	3,566 17	2,594 67	1,697 85	28,980 32
Repairs, ordinary	Nil.	Nil.	Nil.	25 00	40 43	18 73	2,576 52	5,744 14	Nil.	219 26	6 43	528 05	9,158 56
" extraordinary	854 68	260 05	178 40	38 50	141 80	39 59	Nil.	157 32	107 72	512 74	Nil.	8 55	2,299 35
Totals	1,710 22	2,799 08	3,081 51	2,842 23	3,049 84	2,646 31	3,626 30	8,528 54	3,020 48	4,298 17	2,601 10	2,234 45	40,438 23

DREDGE 'MONTAGUE.'

Wages	290 44	830 00	472 50	440 63	445 00	445 00	445 06	445 00	445 00	257 84	282 88	554 60	5,353 29
Coal		51 74	611 99		31 00	208 25		202 00	150 00			75 00	1,329 98
Provisions	9 00	255 59	145 93	125 97	191 80	120 36	163 57	139 00		102 46			1,253 68
Stores		29 60	141 39	36 07			113 96			78 11			399 13
Equipment					441 75		88 58						530 33
Water		36 00	37 20	20 40	51 60	14 40	26 40	49 60		21 20			256 80
Repairs	6 72	107 56		48 32			84 14	54 46		520 10			821 30
Towage		230 00	1,125 00	531 25	675 00	600 00	1,246 35	650 00	500 00				5,557 60
Contingencies	2 23	52 07			12 50			82 30	13 74				162 84
Totals	308 39	1,592 56	2,534 01	1,202 64	1,848 65	1,388 01	2,168 00	1,622 36	958 74	1,129 71	282 88	629 00	15,664 95
Working expenses	301 67	1,100 00	2,534 01	1,129 10	1,848 65	1,388 01	2,083 86	1,567 90	958 74	609 61	Nil.	629 00	14,150 55
Repairs, ordinary	6 72	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	520 10	Nil.	Nil.	526 82
" extraordinary	Nil.	492 56	Nil.	73 54	Nil.	Nil.	84 14	54 46	Nil.	Nil.	282 88	Nil.	987 58
Totals	308 39	1,592 56	2,534 01	1,202 64	1,848 65	1,388 01	2,168 00	1,622 36	958 74	1,129 71	282 88	629 00	15,664 95

CLASSIFICATION of Disbursements of the Dredges in the Maritime Provinces during the Year ended March 31, 1908—*Continued.*

DREDGE 'NORTHUMBERLAND.'

ITEMS.	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Grand Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages					761 78	758 22	750 00	745 64	637 31	367 19	543 68	674 57	5,238 39
Coal				940 50		902 00	1,111 00	654 50		239 25			3,847 25
Provisions				173 29	277 46	230 69	266 04	275 93	88 68	170 77			1,482 86
Stores				4 10	18 76	6 75	133 76	37 93	18 15	34 40			253 85
Equipment					114 15				27 75				141 90
Water										125 00			125 00
Repairs					5 21			38 85	50 16				94 22
Towage					75 00								75 00
Contingencies					42 26	6 70	0 74	8 08	6 31	9 00	16 77	0 80	90 66
Totals	Nil.	Nil.	Nil.	1,117 89	1,294 62	1,904 36	2,261 54	1,760 93	828 36	945 61	560 45	675 37	11,349 13
Working expenses	Nil.	Nil.	Nil.	1,117 89	1,289 41	1,904 36	2,261 54	1 722 08	778 20	945 61	Nil.	675 37	10,694 46
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	5 21	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	5 21
" extraordinary	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	38 85	50 16	Nil.	560 45	Nil.	649 46
Totals	Nil.	Nil.	Nil.	1,117 89	1,294 62	1,904 36	2,261 54	1,760 93	828 36	945 61	560 45	675 37	11,349 13

TUG 'RONA.'

Wages	208 81	195 00	195 00	213 00	195 00	195 00	195 00	207 50	200 00	195 00	195 00	195 00	2,389 31
Coal	3 08	70 50	93 25	88 13						37 21	22 75		314 92
Provisions	62 36	58 51	69 14	67 85	59 39	55 50	60 27	107 13	49 06	63 40	52 55		705 16
Stores	11 85	2 80	29 15	10 54		0 90	0 85				29 44		85 53
Equipment				25 00									25 00
Water		5 00	3 50										8 50
Repairs			166 00		6 60	57 18			1 68				231 46
Pilotage		7 50											7 50
Towage			15 00										15 00
Wharfage		10 00											10 00
Contingencies		2 26		12 08				4 31	20 80			6 30	45 75
Totals	286 10	351 57	571 04	416 60	260 99	308 58	256 12	318 94	271 54	295 61	299 74	201 30	3,838 13
Working expenses	286 10	351 57	405 04	416 60	254 39	251 40	256 12	318 94	269 86	295 61	104 74	201 30	3,411 67
Repairs, ordinary	Nil.	Nil.	Nil.	Nil.	6 60	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	6 60
" extraordinary	Nil.	Nil.	166 00	Nil.	Nil.	57 18	Nil.	Nil.	1 68	Nil.	195 00	Nil.	419 86
Totals	286 10	351 57	571 04	416 60	260 99	308 58	256 12	318 94	271 54	295 61	299 74	201 30	3,838 13

TUG 'HELENA.'

Wages					468 51	440 00	421 81	405 55	410 58	421 51	385 00	480 33	3,433 32
Coal								203 50		467 50			671 00
Provisions					95 42	139 29	53 41	251 89	71 44	283 94	409 51		1,304 93
Stores					5 37	28 63	8 78	17 82	28 15	64 76	3 63		157 44
Water							25 00	7 50	15 00	15 00			62 50
Repairs							110 49	10 76	26 20		6 12		153 57
Pilotage							3 00						3 00
Contingencies					17 71	2 97	2 82	2 92	2 18	1 89	5 60		36 09
Totals	Nil.	Nil.	Nil.	Nil.	587 01	610 89	625 37	899 94	553 85	1,254 60	809 86	480 33	5,821 85
Working expenses					587 01	610 89	514 88	889 18	527 65	1,254 60	418 74	480 33	5,283 28
Repairs, ordinary					Nil.	Nil.	56 72	10 76	Nil.	Nil.	Nil.	Nil.	67 48
" extraordinary					Nil.	Nil.	53 77	Nil.	26 20	Nil.	391 12	Nil.	471 09
Totals	Nil.	Nil.	Nil.	Nil.	587 01	610 89	625 37	899 94	553 85	1,254 60	809 86	480 33	5,821 85

Classification and Quantities of Material removed by Dredges in the Maritime Provinces during the Year ending March 31, 1908.

DREDGE 'CANADA.'

Description of Material Dredged.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January.	Febuary.	March.	Grand Totals.
	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.
Mud	3,800	4,510	4,480	7,255	14,990	12,780	13,860	16,980	8,100	8,000	Nil.	Nil.	94,755
Totals	3,800	4,510	4,480	7,255	14,990	12,780	13,860	16,980	8,100	8,000	Nil.	Nil.	94,755

'NEW DOMINION.'

Sediment and old logs	325												325
Mud, logs and edgings		1,475											1,475
Gravel, clay and sand			3,900	7,335	5,250			3,150	3,075				22,710
Clay, gravel and stone					3,275	5,812			3,487	4,625			17,199
Clay, stone and mud		1,250							225				1,475
Sand—ordinary				2,675	1,950	300	1,625						6,550
Sand and clay						2,263							2,263
Mud	7,275	7,175					7,575	7,050					29,075
Totals	7,600	9,900	3,900	10,010	10,475	8,375	9,200	10,200	6,787	4,625	Nil.	Nil.	81,072

'ST. LAWRENCE.'

Mud and rock		700											700
Sand					1,890	3,570	630	9,520	9,800				25,410
Gravel			7,280	7,140	5,250	1,260	3,570						24,500
Mud and gravel		1,750											1,750
Sand and rock		700											700
Sand and rubbish		350	700		2,100	2,100							5,250
Mud		6,650	350										7,000
Totals	Nil.	10,150	8,330	7,140	9,240	6,930	4,200	9,520	9,800	Nil.	Nil.	Nil.	65,310

'PRINCE EDWARD.'

Clay and mud		2,115	4,230	8,235	3,420								18,000
Clay and rock		1,080	2,295		2,520								5,895
Sand—ordinary						3,645	4,050						7,695
Sand and mud							2,290	1,080	405				3,775
Mud			2,790	630				5,580	5,625				14,625
Totals	Nil.	3,195	9,315	8,865	5,940	3,645	6,340	6,660	6,030	Nil.	Nil.	Nil	49,990

'GEO. McKENZIE.'

Old logs, mud and gravel		1,710	765										2,475
Boulders and hard clay		315											315
Gravel		720	1,575										2,295
Clay			2,835	270	9,990	4,995	4,770	270					23,130
Clay, stone and rock			675		67								742
Sand, clay and mud					562			720					1,282
Clay and mud									2,385	4,657			7,042
Mud, clay and gravel				405	450		1,980						2,835
Totals	Nil.	2,745	5,850	675	11,069	4,995	6,750	990	2,385	4,657	Nil.	Nil.	40,116

DREDGE 'CAPE BRETON.'

Iron ore, plaster rock		840											840
Clay, mud, logs and ballast			10,185				9,870						20,055
Coal, logs and sand				12,500									12,500
Clay and mud					1,680	6,930							8,610
Clay, stone and rock		9,555	10,710	3,045				2,520	1,785				27,615
Sand—ordinary					11,130								11,130
Sand—very fine, logs and mud					10,290	6,510	4,410	1,470					22,680
Mud, coal and stone						1,365		2,940	2,835				7,140
Totals	Nil.	10,395	20,895	15,545	23,100	14,805	14,280	6,930	4,620	Nil.	Nil.	Nil.	110,570

CLASSIFICATION AND QUANTITIES of Material Removed by Dredges in the Maritime Provinces, &c.—*Continued.*

DREDGE 'NEW BRUNSWICK.'

Description of Material Dredged.	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Grand Totals.
	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.	Yds.
Driving spiles						450							450
Gravel, brick and clay					6,850	1,200							8,050
Clay and mud		950	6,000	7,700	3,150	3,100	1,450						22,350
Clay and sand		3,550	3,850										7,400
Sand and mud			3,450										3,450
Sand							2,750	3,375					6,125
Mud				9,200		9,050	7,800						26,050
Totals	Nil.	4,500	13,300	16,900	10,000	13,800	12,000	3,375	Nil.	Nil.	Nil.	Nil.	73,875

DREDGE 'W. S. FIELDING.'

Clay												1,200	1,200
Gravel						4,100							4,400
Sand and stones								2,800		8,900		1,500	13,200
Stones and gravel						5,200			4,900			2,200	12,300
Sand—ordinary				10,600	24,800				600	6,600	800		43,400
Sand and gravel		19,250	1,900	38,700	10,800	21,250		1,800	6,800				100,500
Mud and sand			40,100	6,150								8,550	54,800
Totals	Nil.	19,250	42,000	55,450	35,600	30,850	Nil.	4,600	12,300	15,500	800	13,450	229,800

DREDGE 'MONTAGUE.'

Rock and mud			850			3,550							4,400
Clay, sand and mud			8,150		2,600		1,400	6,250					18,400
Clay, stone and mud					4,200			1,400	2,100				7,700
Sand—ordinary			3,800	2,800	6,250								12,850
Sand and rock				3,500	1,100								4,600
Mud				1,300			700		800				2,800
Totals	Nil.	Nil.	12,800	7,600	14,150	3,550	2,100	7,650	2,900	Nil.	Nil.	Nil.	50,750

DREDGE 'NORTHUMBERLAND.'

Hard-pan					2,951								2,951
Sawdust and sand					8,886	66,835	64,241	127,775	56,608				324,345
Totals	Nil.	Nil.	Nil.	Nil.	11,837	66,835	64,241	127,775	56,608	Nil.	Nil.	Nil.	327,296

DETAILS OF DREDGING IN THE MARITIME PROVINCES.

During the Fiscal Year ending 31st March, 1908.

Dredge	Locality.	Date.	Time Dredging.	Quantity.	Expenditure at Locality.	Per Cubic Yard for Local Expenditure.	Wintering and Repairs, Equipment and Superintendence—pro rata.	Total Cost.	Per Cubic Yard for Total Expenditure.
			Hrs. Min.	C. Yds.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
St. Lawrence'...	Acadia Coal Co., Pictou, Pictou Co., N.S	May 2 to 6, 1907	14 55	2,800	217 31	0 07·76	71 72	289 03	0 10·32
"	Magdalen Islands Co., Pictou, Pictou Co., N.S	May 7 to 18, 1807	19 30	5,250	261 11	0 04·97	86 18	347 29	0 06·61
"	Campbellton, Restigouche Co., N.B.	May 19 to Aug. 31, and Sept. 15 to 28, 1907	228 07	29,750	7,649 87	0 25·71	2,524 91	10,174 78	0 34·20
"	Mission Point, Bonaventure Co., P.Q.	Sept. 1 to 14 and Sept. 29 to Oct. 12, 1907	61 30	7,560	2,207 24	0 29·19	728 52	2,935 76	0 38·70
"	Pictou Bar, Pictou, Pictou Co., N.S.	Oct. 13 to Dec. 31, 1907	107 30	19,950	5,273 75	0 26·43	1,740 65	7,014 40	0 35·15
Canada'...	Yarmouth, Yarmouth Co., N.S	April 1 to 14 and July 4 to Jan. 29, 1908	790 37	84,295	11,562 57	0 13·71	2,991 24	14,553 81	0 17·26
"	Windsor, Hants Co., N.S	April 15 to July 3, 1907	132 18	10,460	5,163 57	0 49·36	1,335 83	6,499 40	0 62·13
New Dominion'..	Navy Island, St. John, St. John Co., N.B	April 1 to 23, 1907	64 45	5,200	978 75	0 18·82	225 74	1,204 49	0 23·16
"	Cushing's Mill, St. John, St. John Co., N.B	April 24 to May 31, 1907	254 15	12,300	*812 45	0 06·60	187 38	999 83	0 08·12
"	St. Andrews, Charlotte Co., N.B.	June 11 to Nov. 9, 1907	769 00	45,185	7,433 20	0 16·45	1,714 43	9,147 63	0 20·24
"	St. Andrews, New Wharf, Charlotte Co. N.B	Nov. 10 to Feb. 5, 1908	351 45	18,387	4,184 55	0 22·75	965 15	5,149 70	0 28·00
Prince Edward'..	Falconwood, Queen's Co., P.E.I	May 10 to 26, 1907	52 45	2,790	819 50	0 29·37	483 17	1,302 67	0 46·69
"	Pownal " "	May 27 to Aug. 28, 1907	526 11	24,525	3,545 82	0 14·45	2,090 60	5,636 42	0 22·98
"	Victoria, Crapaud " "	Aug. 29 to Nov. 2, 1907	230 00	11,065	3,330 63	0 30·10	1,963 74	5,294 37	0 47·84
"	Marine and Fisheries Wharf, Queen's Co., P.E.I	Nov. 3 to Dec. 26, 1907	209 20	11,610	2,522 14	0 21·93	1,487 05	4,009 19	0 34·53
Geo. McKenzie'..	Acadia Coal Co., Pictou, Pictou Co., N.S	May. 11 to 13, 1907	12 00	315	110 15	0 34·97	74 83	184 98	0 58·70
"	New Glasgow, Pictou Co., N.S.	May 14 to June 16, 1907	68 30	4,770	1,885 52	0 39·52	1,280 88	3,166 40	0 66·38
"	Copper Smelting Co. Wharf, Pictou, Pictou Co., N.S	June 17 to July 2, 1907	5 00	3,780	529 77	0 14·01	359 88	889 65	0 23 53
"	Shippegan, Gloucester Co., N.B.	July, 16 to Nov. 10, 1907	160 40	24,209	7,103 12	0 29·34	4,825 31	11,928 43	0 49 37
"	Port Mulgrave (Pirate Cove), Guysboro' Co., N.S	Dec. 23 to Jan. 31, 1908	166 00	7,042	2,325 50	0 33·02	1,579 76	3,905 26	0 55 45

'Cape Breton'	Whitney Pier, Cape Breton Co., N.S.	May 3 to 17, 1907	71 45	5,985	770 75	0 12·87	310 35	1,081 10	0 18 06
"	International Pier, Cape Breton Co., N.S.	May 18 to June 22, 1907	182 45	20,370	1,635 66	0 08 02	658 59	2,294 25	0 11 26
"	Steel & Coal Co., Cape Breton Co., N.S.	June 23 to July 5, 1907	76 15	7,980	1,281 25	0 16·05	515 89	1,797 14	0 22 52
"	Cow Bay, Port Morien, Cape Breton Co., N.S.	July 16 to Aug. 19, 1907	184 30	33,920	2,849 29	0 08·40	1,147 27	3,996 56	0 11 78
"	Glace Bay, Cape Breton Co., N.S.	Aug. 20 to Nov. 13, 1907	171 15	34,755	6,539 48	0 18·81	2,633 14	9,172 62	0 26 39
"	Dominion Coal Co. Wharf, Louisburg, Cape Breton Co., N.S.	Nov. 14 to Dec. 14, 1907	58 30	7,560	2,382 74	0 31·51	959 42	3,342 16	0 44 20
'New Brunswick'	Belleisle, King's Co., N.B.	May 14 to Oct. 21, 1907	1,211 00	67,750	5,906 60	0 08·71	2,443 44	8,349 44	0 12 32
"	Oromocto Shoal, Sunbury Co., N.B.	Oct. 22 to Nov. 14, 1907	135 00	6,125	990 07	0 16·16	409 61	1,399 68	0 22 83
'W. S. Fielding'	Pictou, Pictou Bar, N.S.	May 16 to Sept. 21, 1907	310 00	183,150	12,520 16	0 06·83	11,828 44	24,348 60	0 13 29
"	Yarmouth, Yarmouth Co., N.S.	Nov. 22 to Feb. 12, 1908	90 60	33,200	6,117 40	0 18·42	5,579 43	11,896 83	0 35 83
"	St John Harbour Channel, St. John Co., N.B.	Feb. 25 to March 31, 1908	18 23	13,450	2,948 67	0 21·92	2,785 77	5,734 44	0 42 63
'Montague'	Souris, King's Co., P.E.I.	May 23 to Oct. 7 and Nov. 1 to Dec. 21, 1907	782 30	50,750	9,312 71	0 18·35	6,949 44	16,262 15	0 32 04
'Northumberland'	Bridgewater, Lunenburg Co., N.S.	Aug. 25 to Dec. 13, 1907	741 30	327,296	12,440 43	0 03·80	5,385 16	17,825 59	0 05 44
Loggieville'	Loggieville, Northumberland Co., N.B.	July 30 to Nov. 27, 1907	.....	13,201	4,888 04	0 37·02	.....	4,888 04	0 37 02
			8,459 01	1,136,735	138,499 17	0 12·18	68,522 92	207,022 09	0 18 21

*Tug service provided by owners.

Expenditure for Dredging in New Brunswick for the Thirty-six Years ended March 31, 1908.

County.	Locality.	Total For the Thirty-five Years ended March 31, 1907.			For the Year 1907 08.			Total Quantity.	Total Cost.	Cost for each County
		Quantity.	Cost.	Cost for County.	Quantity.	Cost.	Cost for County.			
		Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.
Charlotte	St. Andrews	66,085	15,284 87		45,185	9,147 63		111,270	24,432 50	
	" New Wharf			15,284 87	18,387	5,149 70	14,297 33	18,387	5,149 70	29,582 20
Gloucester	Bathurst	98,637	29,095 79					98,637	29,095 79	
	Caraquet	16,485	6,312 23					16,485	6,312 23	
	Shippegan	64,545	21,452 11	56,860 13	24,209	11,928 43	11,928 43	88,954	33,480 54	68,788 56
Kent	Richibucto	172,778	53,544 01					172,778	53,544 01	
	Cocagne	27,180	9,601 45					27,180	9,601 45	
	Buctouche	13,005	4,934 24					13,005	4,934 24	
	" Priests Point	3,510	1,110 70					3,510	1,110 70	
	" Chapel "	4,140	1,310 07					4,140	1,310 07	
	" Robertson's wharf	45	14 23	70,514 70				45	14 23	70,514 70
King's	Belleisle	79,905	13,052 23		67,750	8,349 44		147,655	21,401 67	
	Kennebecasis River	116,270	20,081 82					116,270	20,081 82	
	Moss Glen	10,200	1,924 47					10,200	1,924 47	
	Westfield	1,300	362 19					1,300	362 19	
	Glenwood Wharf	28,600	2,417 77					28,600	2,417 77	
	Shamper's "	4,700	703 07					4,700	703 07	
	Jenkin's Cove Wharf	13,650	1,720 64					13,650	1,720 64	
	Cedars	19,700	1,948 64					19,700	1,948 64	
	Evandale	75	67 18					75	67 18	
	Oak Point	12,100	1,979 05					12,100	1,979 05	
	Victoria Wharf	21,700	2,448 40	46,705 47			8,349 44	21,700	2,448 40	55,054 91
Northumberland	Horse Shoe, Miramichi	208,892	55,058 36					208,892	55,058 36	
	Outer Bar "	29,935	7,965 31					29,935	7,965 31	
	Grand Dune "	37,975	10,121 67					37,975	10,121 67	
	Gordon Flats "	22,425	4,403 95					22,425	4,403 95	
	Neguac "	6,300	6,969 76					6,300	6,969 76	
	Loggieville			84,519 05	13,201	4,888 04	4,888 04	13,201	4,888 04	89,407 09
Queen's	Grand Lake	215,232	30,085 41					215,232	30,085 41	
	" McNair's Cove	20,440	4,522 82					20,440	4,522 82	
	Jemseg	87,230	17,190 06					87,230	17,190 06	
	Washademoak	65,675	8,073 65					65,675	8,073 65	
	" Cambridge Whf.	2,900	1,073 31					2,900	1,073 31	
	" Ackerley's "	4,840	995 20					4,840	995 20	
	" Huestis "	270	212 72					270	212 72	

	" Webster's "	5,000	764 58					5,000	764 58		
	" Robertson's "	5,750	422 14					5,750	422 14		
	" Colwell's Creek	8,290	2,557 52					8,290	2,557 52		
	Grimross, Middleground	12,040	3,274 99					12,040	3,274 99		
	Gagetown Creek Canal	45,935	7,739 97					45,935	7,739 97		
	Spoon Island	9,315	1,192 36					9,315	1,192 36		
	Ward's Shoal, Salmon River	46,625	4,593 59					46,625	4,593 59		
	Curley Shoal	36,625	3,369 16					36,625	3,369 16		
	Chipman & Brigg's Corner	104,275	12,269 49					104,275	12,269 49		
	Upper Gagetown Wharf	1,700	1,104 90					1,700	1,104 90		
	McClure Shoal	39,525	4,556 66					39,525	4,556 66		
	Queen's Coal Co., Newcastle	14,475	1,335 06					14,475	1,335 06		
	Hampstead	1,200	401 36					1,200	401 36		
	Belyea's Wharf	1,865	609 25	106,344 20				1,865	609 25	106,344 20	
Restigouche	Dalhousie	22,301	6,543 08					22,301	6,543 08		
	" McManus Contract	13,336	1,825 67					13,336	1,825 67		
	" Railway Wharf	8,460	1,203 48					8,460	1,203 48		
	" Ferry Landing	12,992	3,632 33					12,992	3,632 33		
	" Hilyards	3,850	1,277 78					3,850	1,277 78		
	Traverse	118,860	22,980 63					118,860	22,980 63		
	" Oak Point	2,100	1,020 58					2,100	1,020 58		
	Campbellton Gov't. Wharf	1,750	620 96		29,750	10,174 78		31,500	10,795 74		
	" Contract	9,800	2,254 11					9,800	2,254 11		
	" Basin	18,375	10,354 33	51,712 95			10,174 78	18,375	10,354 33	61,887 73	
St. John	I. C. Railway Terminus	212,242	52,633 18					212,242	52,633 18		
	Navy Island	34,699	12,157 46		5,200	1,204 49		39,899	13,361 95		
	Marble Cove	29,925	4,374 40					29,925	4,374 40		
	Murray's Mills	27,555	3,681 41					27,555	3,681 41		
	Indiantown Wharf	1,615	192 83					1,615	192 83		
	Long Wharf	7,137	2,680 24					7,137	2,680 24		
	Miller & Woodman's	9,275	1,090 42					9,275	1,090 42		
	Hayford & Stetson	8,015	942 29					8,015	942 29		
	Indiantown Wharf	450	52 90					450	52 90		
	Adams	7,315	3,247 29					7,315	3,247 29		
	Anchor Line	4,695	996 81					4,695	996 81		
	Dominion Atlantic	15,525	4,484 72					15,525	4,484 72		
	St. John, Winter Berths	439,503	81,451 16					439,503	81,451 16		
	" Harbour Channel	3,413	5,063 92		13,450	5,374 44		16,863	10,798 36		
	Purves & Murchie Mills	675	142 57					675	142 57		
	McAvity's Wharf	4,110	606 88					4,110	606 88		
	Lawton's "	570	101 46					570	101 46		
	Thorne "	1,980	249 02					1,980	249 02		
	Maritime Nail Co., Wharf	1,425	224 52					1,425	224 52		
	Cushing's Mills	20,850	1,222 86		12,300	999 83		33,150	2,222 69		
	Hilyard Bros	1,400	314 10					1,400	314 10		
	Kennebecasis River	2,025	604 37					2,025	604 37		
	Partridge Island	4,650	2,294 22					4,650	2,294 22		
	" Channel for water pipe	8,215	5,173 82	183,982 85			7,938 76	8,215	5,173 82	191,921 61	
Sunbury	Oromocto	395,447	66,427 58		6,125	1,399 68		401,572	67,827 26		
	McLean Wharf	625	181 59					625	181 59		

Expenditure for Dredging in New Brunswick for the Thirty-six Years ended March 31, 1908.

County.	Locality.	Total For the Thirty-five Years ended March 31, 1907.			For the Year, 1907-08.			Total Quantity.	Total Cost.	Cost for each County
		Quantity.	Cost.	Cost for County.	Quantity.	Cost.	Cost for County.			
		Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts	$ cts.
Sunbury	Ox Island	51,800	5,266 50					51,800	5,266 50	
	French Lake	25,475	3,787 49					25,475	3,787 49	
	Bent's Wharf, Maugerville	2,310	428 44					2,310	428 44	
	Upper Sheffield	3,830	425 15	76,516 75			1,399 68	3,830	425 15	77,916 43
Westmoreland	Point du Chene	182,980	42,162 18					182,980	42,162 18	
	Cape Tormentine	35,120	9,004 92	51,167 10				35,120	9,004 92	51,167 10
York	Fredericton	126,365	21,679 06					126,365	21,679 06	
	St. Mary's Ferry	15,570	6,827 36					15,570	6,827 36	
	Gibson	30,395	4,379 52					30,395	4,379 52	
	Naashwaak	1,600	435 22					1,600	435 22	
	Fisher & Chesnut Shoals	8,200	1,547 12					8,200	1,547 12	
	Canada Eastern Ry., Wharf	3,970	1,013 98					3,970	1,013 98	
	Springhill, Chapel & Russel									
	Bars	96,295	24,386 78					96,295	24,386 78	
	Robinson's Bar	6,965	1,717 16					6,965	1,717 16	
	Douglas Booms	14,235	1,512 87	63,499 07				14,235	1,512 87	63,499 07
	'New Brunswick' Equipment		1,591 12	1,591 12					1,591 12	1,591 12
	Totals	3,914,852	808,698 26	803,698 26	235,557	58,976 46	58,976 46	4,150,409	867,674 72	867,674 72

Expenditure for Dredging in Nova Scotia for the Thirty six Years ended March 31, 1908.

County.	Locality.	Total for the Thirty-five Years ended March 31, 1907.			For the Year 1907-08.			Total Quantity.	Total Cost.	Cost for each County.
		Quantity.	Cost.	Cost for County.	Quantity.	Cost.	Cost for County.			
		Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.
Antigonish..	Antigonish	22,025	3,649 15					22,025	3,649 15	
	Harbour au Bouche	59,243	19,703 33					59,243	19,703 33	
	Tracadie	12,245	5,530 29					12,245	5,530 29	
	McNair's Cove	11,265	10,035 68					11,265	10,035 68	
	Bayfield	12,871	9,505 79					12,871	9,505 79	
	Arisaig	8,330	7,452 26					8,330	7,452 26	
	Cribbin's Point	4,675	4,125 19	60,001 69				4,675	4,125 19	60,001 69
Annapolis	Annapolis	2,825	1,635 68	1,635 68				2,825	1,635 68	1,635 68
Cape Breton	Lingan	22,267	9,275 56					22,267	9,275 56	
	Sydney	62,917	20,904 88					62,917	20,904 88	
	Little Glace Bay	46,450	16,936 02		34,755	9,172 62		81,205	26,108 64	
	Port Caledonia	17,413	8,242 21					17,413	8,242 21	
	Benacadie Pond	20,860	5,993 90					20,860	5,993 90	
	Christmas Island	19,045	3,364 98					19,045	3,364 98	
	Cow Bay	3,255	1,892 32		33,920	3,996 56		37,175	5,888 88	
	Main à Dieu	4,680	2,720 76					4,680	2,720 76	
	Louisburg	23,310	5,480 52					23,310	5,480 52	
	North Sydney (Coal & Steel Co)	54,490	13,143 92		7,980	1,797 14		62,470	14,941 06	
	" Salter's Wharf	3,045	505 58					3,045	505 58	
	" Ballast Pier	2,625	364 03					2,625	364 03	
	" Vooght's Wharf	1,470	204 52					1,470	204 52	
	" Ingraham's "	1,680	275 85					1,680	275 85	
	" Ballast Heaps	2,205	165 65					2,205	165 65	
	Sydney (Internat'l. Coal Pier)	14,800	8,356 26		20,370	2,294 25		35,170	10,650 51	
	" (Whitney Pier)	600	281 12		5,985	1,081 10		6,585	1,362 22	
	" (Dom'n. Coal Co. Wharf)			98,108 08	7,560	3,342 16	21,683 83	7,560	3,342 16	119,791 91
Colchester	Tatamagouche	65,480	20,373 07	20,373 07				65,480	20,373 07	20,373 07
Cumberland	Parrsboro	42,595	12,804 68					42,595	12,804 68	
	Wallace	93,865	24,140 37	36,945 05				93,865	24,140 37	36,945 05
Digby	Digby	55,740	11,009 10					55,740	11,009 10	
	Weymouth	93,865	28 62	11,037 72				93,865	28 62	11,037 72
Guysboro	Guysboro	5,400	1,413 53					5,400	1,413 53	
	Larry's River	47,655	16,519 85					47,655	16,519 85	
	Port Mulgrave	4,347	2,494 81		7,042	3,905 26		11,389	6,400 07	
	Sherbrooke	1,260	496 49					1,260	496 49	

EXPENDITURE for Dredging in Nova Scotia for the Thirty-six Years ended March 31, 1908—*Continued.*

County.	Locality.	TOTAL FOR THE THIRTY-FIVE YEARS ENDED MARCH 31, 1907.			FOR THE YEAR 1907-08.			Total Quantity.	Total Cost.	Cost for each County.
		Quantity.	Cost.	Cost for County.	Quantity.	Cost.	Cost for County.			
		Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.
	Cook's Cove	16,815	7,336 29					16,815	7,336 29	
	St. Mary's River	81,812	22,352 04					81,812	22,352 04	
	Tickle Passage, Little Canso	3,015	4,477 97					3,015	4,477 97	
	Bar Sonoro, St. Mary's River	5,628	2,204 33	57,295 31			3,905 26	5,628	2,204 33	61,200 57
Halifax	Chessetcook	3,920	2,593 71					3,920	2,593 71	
	Halifax Ferry	6,177	2,063 38					6,177	2,063 38	
	Herring Cove	26,101	12,049 68					26,101	12,049 68	
	Ketch Harbour	4,227	1,690 53					4,227	1,690 53	
	Richmond Wharf	792	182 53					792	182 53	
	Roche's Wharf	1,750	620 28					1,750	620 28	
	Halifax Railway Terminus	35,565	11,056 79					35,565	11,056 79	
	Jeddore	21,515	4,958 56					21,515	4,958 56	
	North West Arm	7,350	2,970 39					7,350	2,970 39	
	Cunard's Wharf	1,400	530 04					1,400	530 04	
	Salmon River	14,288	5,962 93					14,288	5,962 93	
	Spry Bay	10,665	3,075 72					10,665	3,075 72	
	Eastern Passage	2,070	596 97					2,070	596 97	
	Sambro	4,815	1,388 61	49,740 12				4,815	1,388 61	49,740 12
Inverness	Whycocomagh	19,760	3,491 31					19,760	3,491 31	
	Campbell's Pond	4,940	872 83					4,940	872 83	
	Port Hastings	270	190 37					270	190 37	
	Cheticamp	206,275	71,409 02					206,275	71,409 02	
	Mabon	326,800	82,124 26					326,800	82,124 26	
	Port Hood	15,275	10,796 14					15,275	10,796 14	
	Grand Etang	10,980	3,131 25	172,315 18				10,980	3,131 25	172,315 18
Lunenburg	Lunenburg	70,510	22,194 57					70,510	22,194 57	
	Mahone Bay	58,019	15,089 29					58,019	15,089 29	
	Voglers Cove	11,600	5,075 53					11,600	5,075 53	
	LaHave River			12,359 39	327,296	17,825 59	17,825 59	327,296	17,825 59	60,184 98
Pictou	Acadia Coal Co. Wharf	22,460	5,262 26		3,115	474 01		25,575	5,736 27	
	Albion Mines	9,475	2,181 25					9,475	2,181 25	
	East River	144,407	47,696 43					144,407	47,696 43	
	Halifax Coal Co. Wharf	1,650	359 90					1,650	359 90	
	Pictou Pub. Market Wharf	114,600	27,368 22					114,600	27,368 22	
	" Railway Wharf	92,649	24,673 79					92,649	24,673 79	

Pictou	Pictou Landing Ry. Wharf	48,645	8,898 40					48,645	8,898 40	
	" Steam Ferry Slip	720	246 18					720	246 18	
	" Bar	113,600	17,737 68		203,100	31,363 00		316,700	49,100 68	
	" Hogg, Craig & Co. Wf.	6,090	1,204 29					6,090	1,204 29	
	" Burnam & Morrell	1,050	211 19					1,050	211 19	
	" Magdalen Islds. (Cold Storage)				5,250	347 29		5,250	347 29	
	" Copper and Smelting Co. Wharf				3,780	899 65		3,780	899 65	
	Vale Colliery	1,395	682 15					1,395	682 15	
	River John	85,173	22,243 98					85,173	22,243 98	
	Granton	25,110	10,707 59					25,110	10,707 59	
	New Glasgow	35,445	11,795 79		4,770	3,166 40		40,215	14,962 19	
	Middle River	15,060	4,984 40					15,060	4,984 40	
	C. Dwyer Wharf	5,400	1,087 66					5,400	1,087 66	
	" Berths for S. S. 'Campania'	5,850	2,000 22					5,850	2,000 22	
	Dwyer & Co's. Wharf	360	123 09					360	123 09	
	Intercolonial Coal Mining Co., East River, Pictou	46,900	7,410 86	196,875 33			36,250 35	46,900	7,410 86	233,125 68
Queen's	Liverpool	82,230	31,944 10					82,230	31,944 10	
	Port Mouton	10,620	2,283 77	34,227 87				10,620	2,283 77	34,227 87
Richmond	D'Escousse	23,650	10,052 76					23,650	10,052 76	
	St. Peter's Canal	90,830	27,435 95					90,830	27,435 95	
	St. Peter's	7,150	2,407 41					7,150	2,407 41	
	Grand Goulet	23,584	5,570 49					23,584	5,570 49	
	River Bourgeois	18,920	4,468 87					18,920	4,468 87	
	Marine Slip	320	56 53					320	56 53	
	Poulement	10,080	2,566 14					10,080	2,566 14	
	Fourchu Harbour	16,885	9,454 94					16,885	9,454 94	
	North Pond, Red Islands	21,900	12,203 23	74,216 32				21,900	12,203 23	74,216 32
Shelburne	Lockeport	94,168	22,049 58					94,168	22,049 58	
	Barrington Passage	42,670	13,607 03					42,670	13,607 03	
	Osburne	990	145 31					990	145 31	
	Wood's Harbour	1,170	245 45					1,170	245 45	
	Barrington Public Wharf, Sherrow's Channel	61,020	17,612 09					61,020	17,612 09	
	Shelburne	9,120	3,956 95	57,616 41				9,120	3,956 95	57,616 41
Yarmouth	Yarmouth	540,622	136,146 03		117,495	26,450 64		658,117	162,596 67	
	Milton	663	499 46	136,645 49			26,450 64	663	499 46	163,096 13
Hants	Windsor	13,280	10,415 24	10,415 24	10,460	6,499 40	6,499 40	23,740	16,914 64	16,914 64
Victoria	Aspey Bay	3,820	1,569 95	1,569 95				3,820	1,569 95	1,569 95
Dredge 'C. B.' losses			762 98	762 98					762 98	762 98
	Totals	3,590,699	1,062,240 88	1,062,240 88	792,878	112,615 07	112,615 07	4,383,577	1,174,855 95	1,174,855 95

Expenditure for Dredging in Prince Edward Island for the Thirty-six Years ended March 31, 1908.

County.	Locality.	Total for the Thirty-five Years ended March 31, 1907.			For the Year, 1907-1908.			Total Quantity.	Total Cost.	Cost for each County.
		Quantity.	Cost.	Cost for County.	Quantity.	Cost.	Cost for County.			
		Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.	Cubic yards.	$ cts.	$ cts.
King's	Grand River	76,170	15,304 04					76,170	15,304 04	
	Montague River	182,295	36,547 47					182,295	36,547 47	
	Murray Harbour South	101,253	18,147 03					101,253	18,147 03	
	Sturgeon	16,026	6,066 27					16,026	6,066 27	
	St. Mary's Wharf	21,963	4,752 55					21,963	4,752 55	
	Georgetown Ry. Wharf	1,002	408 32					1,002	408 32	
	" Queen's Wharf	2,205	1,328 80					2,205	1,328 80	
	Cardigan Bridge	35,955	8,616 36					35,955	8,619 36	
	Newport	3,240	917 82					3,240	917 82	
	Souris	3,825	1,083 53		50,750	16,262 15		54,575	17,348 68	
	Murray River	43,447	11,985 49					43,447	11,985 49	
	" Railway	5,926	1,860 30					5,926	1,860 30	
	Morell	43,335	11,972 59	118,993 57			16,262 15	43,335	11,972 59	135,255 72
Queen's	Charlottetown Ry. Wharf	125,391	33,956 60					125,391	33,956 60	
	" Pownal	23,710	5,214 28		24,525	6,636 42		48,235	10,850 70	
	" Ferry	10,075	2,006 99					10,075	2,006 99	
	" Steam Nav. Co	13,113	5,491 77					13,113	5,491 77	
	" Connolly Whf	9,978	4,409 68					9,978	4,409 68	
	" Peake Bros.	13,995	5,856 02					13,995	5,856 02	
	" Queen St. Slip	3,915	1,109 03					3,915	1,109 03	
	" Geo. Peake's Wharf	6,885	2,232 03					6,885	2,232 03	
	" Poole's Wharf	12,240	1,609 95					12,240	1,609 95	
	" McMillan "	6,165	1,320 13					6,165	1,320 13	
	" Dom. Building Sewer	5,355	1,146 68					5,355	1,146 68	
	" Pub. Sewerage	2,880	679 12					2,880	679 12	
	" Geo. Full's Whf	11,520	3,001 96					11,520	3,001 96	
	" Garvell Bros.	2,880	798 04					2,880	798 04	
	" Falconwood Asylum Whf	14,625	3,885 94		2,790	1,302 67		17,415	5,188 61	
	Webster's Corner, East River	203	43 47					203	43 47	
	Crapaud, Victoria	138,490	42,253 96		11,065	5,294 37		149,555	47,548 33	
	Pownal Bay	43,465	10,380 28					43,465	10,380 28	
	Rock Point	82,920	13,426 13					82,920	13,426 13	

	Vernon River	25,240	8,292 55					25,240	8,292 55		
	Wood Islands	8,405	11,801 57					8,405	11,801 57		
	Nine Mile Creek	31,650	6,286 46					31,650	6,286 46		
	Hickey Wharf	750	150 51					750	150 51		
	Carr's Point	12,165	2,441 28					12,165	2,441 28		
	Pinette	3,825	756 24					3,825	756 24		
	Fort Augustus	3,195	631 68					3,195	631 68		
	Southport Ferry	45,300	7,508 75					45,300	7,508 75		
	Red Point	7,161	3,879 60					7,161	3,879 60		
	North Rustico	13,536	4,775 38					13,536	4,775 38		
	South Rustico	11,649	4,109 67					11,649	4,109 67		
	Gauthier's Creek	17,847	8,305 50					17,847	8,305 50		
	Malpeque	28,575	3,483 32					28,575	3,483 32		
	French River	41,671	13,311 46					41,671	13,311 46		
	Bay View	4,095	1,912 87					4,095	1,912 87		
	Wedlocks	1,260	520 48					1,260	520 48		
	Belfast, Halliday's Wharf	15,435	4,468 78					15,435	4,468 78		
	Marine and Fisheries Wharf			221,458 16	11,610	4,009 19	16,242 00	11,610	4,009 19	237,700 81	
Prince	Summerside	91,571	28,032 51					91,571	28,032 51		
	Hurd's Point Pier	65,505	14,315 47					65,505	14,315 47		
	Tignish	11,387	13,005 45					11,387	13,005 45		
	Cascumpec	1,157	538 42					1,157	538 42		
	Cape Traverse	16,740	5,105 89					16,740	5,105 89		
	Holman's Wharf	9,585	1,269 21	62,266 95				9,585	1,269 21	62,266 95	
	Totals	1,533,098	402,718 68	402,718 68	100,740	32,504 80		1,633,838	435,233 48	435,223 48	

Expenditure for Dredging in Quebec for the Thirty-six Years ended March 31, 1908.

From appropriations Maritime Provinces.

Magdalen Isl'ds, Co. Gaspé	House Harbour	6,800	2,392 92					6,880	2,392 92		
"	Amherst Harbour	495	242 05	2,634 97				495	242 05	2,634 97	
Temiscouata	River du Loup	2,587	825 47	825 47				2,587	825 47	825 47	
Rimouski	Rimouski	8,123	3,997 59	3,997 59				8,123	3,997 59	3,997 59	
Bonaventure	Mission Point				7,560	2,935 76	2,935 76	7,560	2,935 76	2,935 76	
	Totals	18,005	7,458 03	7,458 03	7,560	2,935 76	2,935 76	25,565	10,393 79	10,393 79	

STATEMENT of Dredging showing Quantities Removed in each Province, and Cost of each Work for the Thirty-sixth Year ended March 31, 1908.

Fiscal Year.	New Brunswick.		Nova Scotia.		Quebec.		Prince Edward Island.		Total Quantity.	Total Expenditure	Cost per Cubic Yard
	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.			
	Cubic Yards.	$ cts.	Cubic Yards.	$ cts.	Cubic Yards.	$ cts.	Cubic Yards.	$ cts.	Cubic Yards.	$ cts.	$ cts.
1872-3	38,060	13,240 50	23,260	8,422 70					61,320	21,663 20	0 25.328
1873-4	57,725	14,395 57	18,600	6,545 61	6,800	2,392 92			83,125	23,334 10	0 28. 71
1874-5	78,223	17,325 05	24,416	13,238 83			18,655	9,892 89	121,294	40,456 77	0 33.354
1875-6	79,935	17,040 52	91,975	21,855 90			58,283	10,891 80	230,192	49,818 22	0 21.642
1876-7	97,690	23,161 90	127,785	34,846 74			74,460	12,758 27	299,935	70,766 91	0 23.594
1877-8	81,070	23,323 92	106,857	29,607 94			82,860	12,041 18	270,787	64,943 04	0 23.983
1878-9	132,555	27,400 22	116,307	28,267 59			46,490	9,164 07	295,352	64,831 88	0 21.951
1879-80	63,540	16,581 79	127,684	34,765 84	765	371 08	36,390	12,674 98	228,379	64,396 69	0 28.197
1880-1	41,315	12,385 85	87,118	23,061 64	2,317	673 41	46,335	9,298 53	180,085	45,439 46	0 25.232
1881-2	79,640	18,626 87	59,566	33,363 71			47,325	9,356 57	216,531	61,347 15	0 28.331
1882-3	48,565	13,422 70	143,616	32,996 93			68,535	11,081 37	260,716	67,500 00	0 25.890
1883-4	47,058	17,103 38	157,560	49,050 58			79,750	13,355 05	284,368	79,509 01	0 27.957
1884-5	128,997	24,460 35	76,164	25,250 73	8,123	3,997 59	55,075	8,668 01	268,359	62,396 68	0 23.242
1885-6	68,505	14,874 63	56,790	21,482 05			17,137	10,349 66	142,432	46,706 34	0 32.793
1886-7	69,440	11,452 86	53,400	25,621 19			6,137	6,214 74	128,977	43,288 79	0 33. 56
1887-8	50,152	9,252 50	84,175	29,847 60			3,775	5,899 90	138,102	45,000 00	0 32. 58
1888-9	63,633	16,598 08	56,910	32,697 00			24,240	15,502 95	144,783	64,798 03	0 27. 29
1889-90	86,068	20,544 93	59,783	22,821 55			31,422	11,085 39	177,273	54,451 87	0 30. 71
1890-1	96,588	20,375 06	61,698	24,386 57			19,004	8,843 92	177,290	53,605 55	0 30. 23
1891-2	75,023	20,592 85	81,993	27,376 08			31,382	12,788 34	188,398	60,757 27	0 32.249
1892-3	108,035	20,742 26	40,834	18,125 58			66,585	15,112 83	215,354	56.980 67	0 26. 44
1893-4	77,505	21,564 27	59,581	28,664 99			61,536	12,269 24	198,622	62,498 50	0 31. 46
1894-5	59,715	13,630 11	105,463	32,202 70			48,060	10,428 90	213,238	56,261 71	0 26. 38
1895-6	98,905	21,352 63	36,428	15,828 89			36,360	10,299 93	171,693	47,481 45	0 27. 65
1896-7	203,975	34.050 86	84,735	22,080 46			51,078	10,937 62	339,788	67,068 94	0 19. 73
1897-8	187,325	27,611 17	147,085	31,497 57			46,710	10,701 49	381,120	69,810 23	0 18. 31
1898-9	105,058	23,315 82	155,510	36,628 81			51,040	13,283 71	311,608	73,228 34	0 23. 50
1899-1900	175,935	28,232 46	152,033	37,589 22			94,364	17,537 73	422,332	83,359 41	0 19. 76
1900-1	205,369	32,615 29	94,557	36,141 17			26,020	18,984 13	325,946	87,740 59	0 26. 91
1901-2	218,210	28,508 97	143,142	39.247 35			51,320	16,196 95	405,682	83,953 27	0 20. 69
1902-3	197,207	36,195 40	134,648	32,856 93			55,943	16,160 33	387,798	85,212 66	0 21. 97
1903-4	252,725	53,046 12	94,675	34,171 45			49,500	13,775 37	396,900	100,992 94	0 25. 44
1904-5	193,955	46,348 89	203,460	33,359 47			33,030	17,123 82	430,445	96,832 18	0 22. 49
1905-6	224,058	32,549 89	271,637	36,111 20			60,683	11,089 96	556,377	126,072 24	0 21. 58
1906-7	120,095	31,538 51	176,321	61,284 54			53,615	19,047 37	350,031	111,870 42	0 31. 96
1907-8	235,557	58,976 46	792,878	112,615 07	7,560	2,935 76	100,740	32,504 80	1,136,735	207,022 09	0 18. 21
Totals	4,149,411	865,438 64	4,338,643	1,143,942 18	25,565	10,393 79	1,633,838	435,290 80	10,141,467	2,495,376 60	0. 24 60

STATEMENT of Dredging showing Quantities Removed by hand in each Province and Cost of each Dredging for the Thirty-sixth Year ended 31 March, 1908.

1878-9			245	553 13					245	553 13	2	26. 58
1879-80			12,370	3,666 90					12,370	3,666 90	0	29. 64
1880-1			11,140	2,560 25					11,140	2,560 25	0	22. 98
1881-2			10,640	2,650 00					10,640	2,650 00	0	24. 90
1882-3			8,190	2,509 00					8,190	2,500 00	0	30. 52
1883-4			5,460	2,500 00					5,460	2,500 00	0	45. 78
1899-1900			343	248 71					343	248 71	0	72. 51
1900-1			320	250 75					320	250 75	0	78. 35
1902-3			1,645	496 83					1,645	496 38	0	30. 17
Totals			50,353	15,428 12					50,353	15,428 12	0.	30 64

STATEMENT of dredging in the Maritime Provinces showing quantities removed by and expenditure of each dredge during the thirty-five years and nine months ended March 31, 1908.

Dredge.	TOTAL QUANTITIES AND COST FOR THIRTY-FIVE YEARS AND NINE MONTHS ENDED MARCH 31, 1907.			FOR THE YEAR 1907-8.			TOTAL FOR THIRTY-FIVE YEARS AND NINE MONTHS ENDED MARCH 31, 1908.		
	Total Quantity.	Cost.	Per cubic yard.	Quantity.	Cost.	Per cubic yard.	Total Quantity.	Total cost.	Cost per cubic yard.
	Cub. yds.	$ cts.	$ cts.	Cub. yds.	$ cts.	$ cts.	Cub. yds.	$ cts.	$ cts.
St. Lawrence	1,709,944	439,573 88	0 25·70	65,310	20,761 26	0 31·78	1,775,254	460,335 14	0 25·93
Canada	1,112,439	355,692 53	0 31·97	94,755	21,053 21	0 22·22	1,207,194	376,745 74	0 31·20
New Dominion	1,850,627	326,672 99	0 17·65	81,072	16,501 65	0 20·35	1,931,699	343,174 64	0 17·76
Prince Edward	1,476,288	394,247 56	0 26·69	49,990	16,242 65	0 32·49	1,526,278	410,490 21	0 26·89
(Old) Cape Breton	534,938	139,074 33	0 25·99				534,938	139,074 33	0 25·99
Geo. McKenzie	796,873	334,445 59	0 41·97	40,116	20,074 72	0 50·04	836,989	354,520 31	0 42·35
Cape Breton	890,950	162,387 37	0 18·23	110,570	21,683 83	0 19·61	1,001,520	181,071 20	0 18·37
New Brunswick	412,725	88,063 34	0 21·33	73,875	9,749 12	0 13·19	486,600	97,812 46	0 20·09
W. S. Fielding	187,590	34,020 27	0 18·13	229,800	41,979 87	0 18·26	417,390	76,000 14	0 18·20
Montague	20,450	7,679 06	0 37·55	50,750	16,262 15	0 32·04	71,200	23,941 21	0 33·62
Northumberland				327,296	17,825 59	0 05·44	327,296	17,825 59	0 05·44
Loggieville (contract)				13,201	4,888 04	0 37·02	13,201	4,888 04	0 37·02
	8,992,624	2,231,856 92	0 25·37	1,136,735	207,022 09	0 18·21	10,129,559	2,488,879 01	0 24·57

STATEMENT of dredging performed by hand in the Maritime Provinces showing quantities removed and expenditure at each locality for thirty-five years and nine months ended March 31, 1908.

Locality.	TOTAL QUANTITIES AND COST FOR THIRTY-FIVE YEARS AND NINE MONTHS ENDED MARCH 31, 1907.			FOR THE YEAR 1907-8.			TOTAL FOR THIRTY-FIVE YEARS AND NINE MONTHS ENDED MARCH 31, 1908.		
	Total Quantity.	Cost.	Per cubic yard.	Quantity.	Cost.	Per cubic yard.	Total Quantity.	Total cost.	Cost per cubic yard.
	Cub. yds.	$ cts.	$ cts.	Cub. yds.	$ cts.	$ cts.	Cub. yds.	$ cts.	$ cts.
Parrsboro', N.S	42,595	12,804 68	0 30·06				42,595	12,804 68	0 30·06
Windsor "	5,450	1,627 60	0 29·86				5,450	1,627 60	0 29·86
Milton "	663	499 46	0 75·33				663	499 46	0 75·33
Racquette "	1,645	496 38	0 30·17				1,645	496 38	0 30·17
	50,353	15,428 12	0 30·64				50,353	15,428 12	0 30·64

Cost at localities dredged in the Maritime Provinces during the fiscal year ended March 31, 1908

Dredge.	Locality.	Date.	Time Dredging.	Quantity.	Cost.	Cost per Cubic Yard.
			Hrs. Min.	C. yds.	$ cts.	$ cts.
St. Lawrence	Acadia Coal Co., Pictou, Pictou Co., N.S.	May 2 to 6, 1907	14 55	2,800	217 31	0 07·76
	Magdalen Island's Co., Pictou, Pictou Co., N.S.	May 7 to 18, 1907	19 30	5,250	261 11	0 04·97
	Campbellton, Restigouche Co., N.B.	May 19 to Aug. 31, and Sept. 15 to 28, 1907	228 07	29,750	7,649 87	0 25·71
	Mission Point, Bonaventure Co., Que.	Sept. 1 to 14, and Sept. 29 to Oct. 12, 1907	61 30	7,560	2,207 24	0 29·19
	Pictou Bar, Pictou, Pictou Co., N.S.	Oct. 13 to Dec. 31, 1907	107 30	19,950	5,273 75	0 26·43
Canada	Yarmouth, Yarmouth Co., N.S.	April 1 to 14, and July 4 to Jan. 29, 1908	790 37	84,295	11,562 57	0 13·71
	Windsor, Hants Co., N.S.	April 15 to July 3, 1907	132 18	10,460	5,165 57	0 49·36
New Dominion	Navy Island, St. John, St. John Co., N.B.	April 1 to 23, 1907	64 45	5,200	978 75	0 18·82
	Cushing's Mill, St. John, St. John Co., N.B.	April 24 to May 31, 1907	254 15	12,300	*812 45	0 06·60
	St. Andrews, Charlotte Co., N.B.	June 11 to Nov. 9, 1907	769 00	45,185	7,433 20	0 16·45
	St. Andrews, New Wharf, Charlotte Co., N.B.	Nov. 10 to Feb. 5, 1908	351 45	18,387	4,184 55	0 22·75
Prince Edward	Falconwood, Queen's Co., P.E.I.	May 10 to 26, 1907	52 45	2,790	819 50	0 29·37
	Pownal, Queen's Co., P.E.I.	May 27 to Aug. 28, 1907	526 11	24,525	3,545 82	0 14·45
	Victoria, Crapaud, Queen's Co., P.E.I.	Aug. 29 to Nov. 2, 1907	230 00	11,065	3,330 63	0 30·10
	Marine and Fisheries wharf, Queen's Co., P.E.I.	Nov. 3 to Dec. 26, 1907	209 20	11,610	2,522 14	0 21·93
Geo. McKenzie	Acadia Coal Co., Pictou, Pictou Co., N.S.	May 11 to 13, 1907	12 00	315	110 15	0 34·97
	New Glasgow, Pictou Co., N.S.	May 14 to June 16, 1907	68 30	4,770	1,885 52	0 39·52
	Copper Smelting Co. wharf, Pictou, Pictou Co., N.S.	June 17 to July 2, 1907	5 00	3,780	529 77	0 14·01
	Shippegan, Gloucester Co., N.B.	July 16 to Nov. 10, 1907	160 40	24,209	7,103 12	0 29·34
	Port Mulgrave (Pirate Cove), Guysboro' Co., N.S.	Dec. 23 to Jan. 31, 1908	166 00	7,042	2,325 50	0 33·02
Cape Breton	Whitney Pier, Sydney, Cape Breton Co., N.S.	May 3 to 17, 1907	71 45	5,985	770 75	0 12·87
	International Pier, Sydney, Cape Breton Co., N.S.	May 18 to June 22, 1907	182 45	20,370	1,635 66	0 08·02
	Steel & Coal Co., Sydney, Cape Breton Co., N.S.	June 23 to July 5, 1907	76 15	7,980	1,281 25	0 16·05
	Cow Bay, Port Morien, Cape Breton Co., N.S.	July 16 to Aug. 19, 1907	184 30	33,920	2,849 29	0 08·40
	Glace Bay, Cape Breton Co., N.S.	Aug. 20 to Nov. 13, 1907	171 15	34,755	6,539 48	0 18·81
	Dominion Coal Co. wharf, Louisburg, Cape Breton Co., N.S.	Nov. 14 to Dec. 14, 1907	58 30	7,560	2,382 74	0 31·51
New Brunswick	Belleisle, King's Co., N.B.	May 14 to Oct. 21, 1907	1,211 00	67,750	5,906 00	0 08·71
	Oromocto Shoal, Sunbury Co., N.B.	Oct. 22 to Nov. 14, 1907	135 00	6,125	990 07	0 16·16
W. S. Fielding	Pictou, Pictou Co., N.S.	May 10 to Sept. 21, 1907	310 00	183,150	12,520 16	0 06·83
	Yarmouth, Yarmouth Co., N.S.	Nov. 22 to Feb. 12, 1908	90 60	33,200	6,117 40	0 18·42
	St. John Harbour Channel, St. John Co., N.B.	Feb. 25 to March 31, 1908	18 23	13,450	2,948 67	0 21·92
Montague	Souris, King's Co., P.E.I.	May 23 to Oct. 7, and Nov. 1 to Dec. 21, 1907	782 30	50,750	9,312 71	0 18·35
Northumberland	Bridgewater, Lunenburg Co., N.S.	Aug. 25 to Dec. 13, 1907	741 30	327,296	12,440 43	0 03·80
Loggieville	Loggieville, Northumberland Co., N.B.	July 30 to Nov. 27, 1907		13,201	4,888 04	0 36·95

*Tug service provided by owners.

Cost at various localities dredged by the Departmental Dredges during the Fiscal Year ending March 31, 1908.

'CANADA.'

Locality.	Date.	Actual Dredging Time.		Quantity.	Cost.	Cost per Cubic Yard.
		Hrs.	Min.	Yds.	$ cts.	cts.
Yarmouth, Yarmouth Co., N. S...	April 1 to 14, and July 4 to Jan. 29, 1908.....	790	37	84,295	11,562 57	13·71
Windsor, Hants Co., N. S...	April 15 to July 3, 1907 ...	121	55	10,460	5,163 57	49·36

'NEW DOMINION.'

Navy Island, St. John, St. John Co., N. B.....	April 1 to 23, 1907.....	64	45	5,200	978 75	18·82
Cushing's Mill, St. John, St. John Co., N. B.....	April 24 to May 31, 1907...	254	15	12,300	*812 45	06·60
St. Andrews, Charlotte Co., N. B.	June 11 to Nov. 9, 1907....	769	00	45,185	7,433 20	16·45
" New Wharf, Charlotte Co., N. B.....	Nov. 10 to Feb. 5, 1908....	351	45	18,387	4,184 55	22·75

* Tug service provided by owners.

'ST. LAWRENCE.'

Acadia Coal Co., Pictou, Pictou Co., N. S.....	May 2 to 6, 1907.....	14	55	2,800	217 31	07·76
Magdalen Islands Co., Pictou, Pictou Co., N. S.	May 7 to 18, 1907	19	30	5,250	261 11	04·97
Campbellton, Restigouche Co., N. B	May 19 to Aug. 31, and					
Mission Point, Bonaventure Co., P. Q.....	Sept. 15 to 28, 1907	228	07	29,750	7,649 87	25·71
Pictou Bar, Pictou, Pictou Co., N. S.	Sept. 1 to 14, and Sept. 29 to Oct. 12, 1907.....	61	30	7,560	2,207 24	29·19
	Oct. 13 to Dec. 31, 1907 ...	107	30	19,950	5,273 75	26·43

'PRINCE EDWARD.'

Falconwood, Queen's Co., P. E. I..	May 10 to 26, 1907	52	45	2,790	819 50	29·37
Pownal, " " ..	May 27 to Aug. 28, 1907...	526	11	24,525	3,545 82	14·45
Victoria, Crapaud, " ..	Aug. 29 to Nov. 2, 1907....	230	00	11,065	3,330 63	30·10
Marine and Fisheries Whf. " ..	Nov. 3 to Dec. 26, 1907....	209	20	11,610	2,522 14	21·93

'GEO. McKENZIE.'

Acadia Coal Co., Pictou, Pictou Co., N. S.....	May 11 to 13, 1907..... .	12	00	315	110 15	34·97
New Glasgow, Pictou Co., N. S...	May 14 to June 16, 1907...	68	30	4,770	1,885 52	39·52
Copper Smelting Co. Whf., Pictou Co., N. S	June 17 to July 2, 1907....	5	00	3,780	529 77	14·01
Shippegan, Gloucester Co., N. B..	July 16 to Nov. 10, 1907...	460	40	24,209	7,103 12	29·34
Port Mulgrave (Pirate Cove), Guysboro Co., N. S.....	Dec. 23 to Jan. 31, 1908....	166	00	7,042	2,325 50	33·02

'CAPE BRETON.'

Whitney Pier, Sydney, Cape Breton Co., N. S	May 3 to 17, 1907	71	45	5,985	770 75	12·87
International Pier, Cape Breton Co., N. S	May 18 to June 22, 1907	182	45	20,370	1,635 66	08·02
Steel & Coal Co., Cape Breton Co., N. S	June 23 to July 5, 1907	76	15	7,980	1,281 25	16·05
Cow Bay, Port Morien, Cape Breton Co., N. S	July 16 to Aug. 19, 1907	184	30	33,920	2,849 29	08·40
Glace Bay, Cape Breton Co., N.S.	Aug. 20 to Nov. 13, 1907	171	15	34,755	6,539 48	18·81
Dominion Coal Co. Whf., Louisburg, Cape Breton Co., N. S	Nov. 14 to Dec. 14, 1907	58	30	7,560	2,382 74	31·51

'NEW BRUNSWICK.'

Belleisle, King's Co., N. B	May 14 to Oct. 21, 1907	1211	00	67,750	5,906 00	08·71
Oromocto Shoal, Sunbury Co., N.B	Oct. 22 to Nov. 14, 1907	135	00	6,125	990 07	16·16

'W. S. FIELDING.'

Pictou, Pictou Co., N. S	May 10 to Sept. 21, 1907	310	00	183,150	12,520 16	06·83
Yarmouth, Yarmouth Co., N. S.	Nov. 22 to Feb. 12, 1908	90	60	33,200	6,117 40	18·42
St. John, Harbour Channel, St. John Co., N. B	Feb. 25 to Mar. 31, 1908	18	23	13,450	2,948 67	21·92

'MONTAGUE.'

Souris, King's Co., P. E. I	May 23 to Oct. 7, and Nov. 1 to Dec. 21, 1907	782	30	50,750	9,312 71	18·35

'NORTHUMBERLAND.'

Bridgewater, Lunenburg Co., N.S.	Aug. 25 to Dec. 13, 1907	741	30	327,296	12,440 43	03·80

PROVINCE OF QUEBEC.

BATISCAN RIVER.

Work was done at this place from May 17 to 25, 1907, by dredge *Duke of York*, removing a shoal in front of the Richelieu wharf; 4,680 cubic yards of sand, gravel and clay were removed.

Dredging was done between May 27 and July 12, 1907, by dredge *Pontiac*, three and one-half miles from the entrance to this river. Small sand shoals were removed from the channel at different places which had filled in; 33,345 cubic yards of clay and sand were removed.

From July 15 to November 19, 1907, dredging was performed, deepening in front of the Richelieu and Ontario Navigation Company's wharf. Seven cuts were made to remove a sand shoal which had formed; 129,390 cubic yards of sand and clay were removed.

BECANCOUR.

Dredging was done by the dredge *Capital* between June 8 and November 4, 1907, making a channel from the main channel of the St. Lawrence river to the entrance of this river; 101,962 cubic yards of sand were removed.

BERTHIERVILLE.

Dredging was done by dredge *Mohawk* between May 29 and November 30, 1907. The work consisted in making a new channel from the main channel, toward the town, passing at the foot of Isle aux Foin. A cut was also made to deepen the channel in front of the Bayonne river; 104,737 cubic yards of clay, sand and quicksand were removed.

Work was also done at this place by dredge *Mohican* between September 11 and 14, 1907, widening and deepening the channel at the foot of Isle aux Foin. 945 cubic yards of clay and sand were removed.

BLANCHE SHOALS.

From July 8 to November 9, 1907, dredging was performed at this place by dredges Nos. 1 and 2, belonging to the T. F. Moore Co., removing shoals which form in the channel. Several cuts were made to widen channel as well as deepen it; 104,651 cubic yards of clay and sand were removed.

CAP DE LA MADELEINE.

From July 2 to 5, 1907, dredge *St. Pierre* worked, cleaning and deepening around the wharf; 5,130 cubic yards of clay were removed.

CHARLEMAGNE.

Dredge *St. Louis* worked from July 25 to November 23, 1907, widening and deepening the main channel at the head of Gaudry's island; 19,461 cubic yards of clay were removed. This dredge belongs to the department.

CHATEAUGUAY RIVER.

Dredge *Huron* worked from May 31 to November 30, 1907, cleaning out the mouth of the St. Louis river and improving the channel to the Chateauguay river; 130,030 cubic yards of boulders, gravel, clay and sand were removed.

CHICOUTIMI.

Between May 20 and October 31, 1907, the departmental dredge *Progress* worked, dredging a channel about five miles below Chicoutimi; 101,800 cubic yards of clay, sand and boulders were removed.

Dredge *Iroquois* worked from July 3 to August 10, also from October 10 to October 26, 1907, deepening the channel leading into the main channel; also deepening around the wharf; 8,540 cubic yards of sand and clay were removed.

DORION.

Dredge *Canada* worked from May 28 to August 9, 1907, cleaning out and making an approach to the village. 20,758 cubic yards of rock, clay, stones and hardpan were removed.

DORVAL.

From July 8 to November 2, 1907, work was performed by the departmental dredge *Challenge*, making a channel in front of the boat club's wharf; 38,900 cubic yards of clay and sand were removed. Dredge *St. Louis,* also belonging to the department, worked from June 24 to July 8, 1907, removing 1,290 cubic yards of clay.

GODFROYE RIVER.

Dredge *St. Pierre* worked from May 30 to July 1, and also on August 12, 1907, cleaning out and deepening the channel; 29,820 cubic yards of clay were removed.

From September 23 until October 31, 1907, dredge *No. 5, McDonald,* also worked, widening and deepening the turning basin, near the wharf; 56,550 cubic yards of clay and sand were removed.

HUDSON.

Dredging was performed by dredge *No. 3,* belonging to the Dominion Dredging Company from June 22 to August 1, 1907, deepening and widening the channel in front of the wharf; 19,396 cubic yards of clay, sand and boulders were removed.

ISLE AU FOIN.

From July 29 to August 10, 1907, dredge *Chateauguay* worked, making a cut from the head of this island toward the wharf, starting from the main channel; 12,860 cubic yards of clay and sand were removed.

L'ASSOMPTION.

Dredge *Premier* worked from June 3 to July 27, 1907, widening and deepening the channel at the head of Gaudry's island. Also removing a shoal at the entrance of the river; 52,030 cubic yards of boulders and clay were removed.

MASKINONGE.

From September 16 to November 19, 1907, dredge *Chateauguay* worked, widening and deepening the channel leading to the village; 46,620 cubic yards of clay and sand were removed.

Dredge *Prince Arthur* also worked from November 6 to 30, 1907, deepening and widening the channel about seven miles from the entrance; 28,572 cubic yards of sand and clay were removed.

MONTREAL.

Dredge *St. Louis,* belonging to the department, worked between July 18 and 20, 1907, starting a channel in front of the Grand Trunk Boating Club; 300 cubic yards of clay were removed.

NICOLET RIVER.

Dredge *Ottawa* worked on November 2, 1907, only, and work consisted in dredging the channel at the entrance to this river, widening and deepening it; 400 cubic yards of clay and sand were removed.

PAPINEAUVILLE.

Departmental dredge *Nipissing* worked from July 8 to 31, 1907, dredging in front of saw-mill, and also made a cut through a shoal to straighten and deepen old channel; 12,285 cubic yards of clay, sand and hardpan were removed.

POINT CAVAGNALE.

Dredge *Chateauguay* worked from May 28 to July 24, 1907, removing 37,940 cubic yards of clay and sand. The work consisted in making a cut from the main channel to the shore.

PORT ST. FRANCIS.

Dredging was done by the dredge *Chateauguay* from August 12 to September 14, 1907, and by the dredge *Ottawa* (L. Cohen & Son) from September 23, to November 1, and from November 4 to 23, 1907. The work performed consisted in cleaning and deepening the approaches to and around the wharf; 67,765 cubic yards of clay and sand were removed.

QUEBEC.

From November 4 to 29, 1907, dredge *Progress,* belonging to the department, worked, deepening the channel opposite the St. John railway wharf in the inner basin; 12,840 cubic yards of clay, sand and boulders were removed.

Dredge *International,* also belonging to the department, worked from May 20 to November 16, 1907, continuing the dredging previously done; levelling the bottom for the deep water cribs for the extension of the new wharfs at the breakwater; 88,500 cubic yards of sand and boulders were removed.

RIDEAU CANAL.

From May 20 to June 30, 1907, dredge *Nipissing,* belonging to the Department of Public Works, made a cut on government land at Hog's Back. The cut was 956 feet long and 25 feet wide and the material taken out was used for filling behind

the dam and bridge to stop leakage and also strengthen the work. A cut was also made at Long island to get material to fill in behind stop-logs at bywash to prevent leakage; 12,915 cubic yards of sand and clay were removed.

RIMOUSKI.

Three dredges worked here, viz.: *Oneida,* from July 6 to August 23, 1907, removing 6,313½ cubic yards of clay and sand; dredge *Iroquois,* from August 21 to September 30, 1907, removing 4,170 cubic yards of clay and sand; and dredge *Premier,* from September 2 to October 29, 1907, removing 7,791 cubic yards of clay and sand. The work consisted of dredging a channel from the wharf out to deep water.

RIVER DU LOUP (EN HAUT).

From May 31 to September 14, 1907, dredge *No. 6* worked, deepening the channel in front of the village wharf, and also at Tourville Mills, below the wharf; 98,540 cubic yards of clay, sand, stones and hardpan were removed. The dredge belongs to St. Lawrence and Great Lakes Dredging Company.

RIVER JESUS.

Dredge *Mohican* worked from July 10 to August 19, 1907, and from September 19 to November 16, 1907, making a cut in the main channel at the Jésus flats, continuing the work done the previous season: 18,321 cubic yards of clay, sand and boulders were removed.

From September 20 to November 28, 1907, dredge *Oneida* also worked, widening and deepening the channel at the entrance to this river; 29,185 cubic yards of clay and sand were also removed.

RIVER OUELLE.

From July 19 to September 14, 1907, dredge *No. 5,* General Construction Company, worked, deepening and widening the channel and removing 35,925 cubic yards of clay.

RIVER ST. FRANCIS.

Dredge *Prince Louis* worked from May 20 to November 6, 1907, widening and deepening the channel at different places from one-half mile below the wharf as far as the entrance to this river. Work was also done in front of the Indian Village, deepening the channel; 320,016 cubic yards of sand and quicksand were removed.

From May 29 to June 1, dredge *Duke of York* also worked, removing a shoal which had filled in the main channel; 3,640 cubic yards of clay and sand were removed.

RIVIÈRE DU LIEVRE.

Departmental dredge *No. 2* worked from July 29 to October 5, 1907, making a turning basin, one-quarter mile below the locks. One cut was also made through the landslide. Work was also done removing the debris from the cofferdam backing; 8,954 cubic yards of clay were removed.

SAGUENAY RIVER.

From September 5 to October 31, 1907, dredge *Algonquin* worked, deepening and widening the main channel in front of the wharf; 32,522 cubic yards of clay, sand and boulders were removed.

ST. ANDREWS.

Dredge *No. 3*, Dominion Dredging Company, worked from August 5 to October 26, deepening and widening the channel at the entrance to the river; 53,450 cubic yards of sand, clay and boulders were removed.

From May 23 to July 31, dredge *No. 2*, Dominion Dredging Company, also worked, deepening and widening the channel below the rapids; 42,363 cubic yards of clay, gravel and sand were removed.

ST. ANTOINE.

From June 10 to August 31, 1907, dredge *Richelieu* worked, making an approach from the wharf to the main channel; 14,890 cubic yards of clay, sand and boulders were removed.

ST. CHARLES.

Departmental dredge *Richelieu* worked from November 4 to 15, 1907, dredging approaches to the wharf; 3,350 cubic yards of clay and sand were removed.

ST. DENIS.

Dredge *Richelieu*, belonging to the department, worked from May 22 to June 5, 1907, from September 4 to October 12, and from October 22 to November 2, 1907, deepening alongside and in front of the wharf; 11,200 cubic yards of sand and clay were removed.

ST. MARC.

Dredge *Richelieu*, belonging to the department, worked from October 14 to 19, 1907, dredging approaches to the wharf; 1,850 cubic yards of sand and clay were removed.

ST. MAURICE RIVER.

The dredge *St. Pierre* worked from May 23 to 29; from July 5 to August 10, and from August 13 to November 16, 1907, deepening and widening the channel opposite Grant's saw-mill. 146,440 cubic yards of sand and clay were removed.

Dredge *No. 5 MacDonald* also worked from June 4, to July 9, 1907, deepening and widening the western channel near the wharfs; 33,660 cubic yards of clay and sand were removed.

ST. PIERRE LES BECQUETS.

Two dredges worked, viz.: *No. 6*, St. Lawrence and Great Lakes Dredging Co., from September 16 to November 16, 1907, and dredge *Ottawa* from July 2 to September 23, 1907, making a cut 3,340 feet long from the main channel; 125,758 cubic yards of clay, sand, rock and stones removed.

ST. PLACIDE.

Dredge *Central City* worked from May 30 to November 22, 1907, making a new channel from the wharf out to the main channel. Two cuts were made; 131,950 cubic yards of clay, sand, stones and boulders were removed.

SOREL.

Dredge *Little Giant* worked from May 27 to November 2, 1907, dredging alongside the wharf to allow small boats to land, as well as giving them shelter; 157,270 cubic yards of clay, sand and stones were removed.

VAUDREUIL.

Dredge *No. 2,* Dominion Dredging Co., worked from August 5 to October 29, 1907, and dredged a channel starting at the bay leading towards the wharf; 35,134 cubic yards of clay, gravel, sand and mud were removed.

VILLE MARIE.

Dredge *Queen,* belonging to the department, worked from June 4 to August 31, 1907, dredging in front and alongside the wharf to allow boats to land; 22,140 cubic yards of clay were removed.

YAMASKA RIVER.

The dredge *Duke of York* worked from June 3 to November 30, 1907, dredging in the channel near the mouth of the river; 334,710 cubic yards of gravel, sand and clay were removed.

PROVINCE OF ONTARIO.

AMHERSTBURG.

Between May 20 and June 8, 1907, the dredge *Ontario* worked, removing boulders from the south end of the Pittsburg Coal Company's dock. Ridges were also levelled in front of Detroit, Windsor and Belle Isle Company's dock; 625 cubic yards were removed. This dredge belongs to the department.

BEAVERTON.

Work was done by the dredge *Simcoe* between May 23 and July 6, also from October 24 to November 1, 1907, dredging a channel nine feet deep by 60 feet wide from lake to a turning basin; some overcasting was done, to be used in filling at back of building piers. 18,094 cubic yards of sand and gravel were removed.

BELLE RIVER.

The dredging was done between May 3 and May 30, 1907, by the dredge *King Edward,* completing an entrance channel to the harbour, 1,200 feet long and 75 feet wide; 11,050 cubic yards of sand and clay were removed.

BELLEVILLE.

From May 20 to June 15, 1907, dredge *Sir Richard* worked, dredging at the entrance to the harbour near the lighthouse; 5,900 cubic yards of clay and quicksand were removed. This is a departmental dredge.

BLIND RIVER.

Work was performed by the dredge *Meade* between July 13 and August 20, also from August 24 to October 24, 1907, constructing a channel to government wharf and turning basin at outer end of same; 83,072 cubic yards of clay and sand were removed.

BRONTE.

Work was performed by dredge *Hamil* between July 8 and August 31, 1907, dredging in channel between the piers and in a turning basin at the mouth of 12-Mile Creek, which empties here, also a channel to a point 500 feet up stream to where a small marine railway is used for hauling out small vessels. This cut is 100 feet wide and affords splendid protection for boats using the harbour; 52,826 cubic yards of gravel, clay and sand were removed.

COBOURG.

Dredge *Chief* worked between June 7 and November 4, 1907, dredging in inner harbour and approaches thereto. The channel in lake as at present dredged, is 150 feet in width. The car ferry slip was also constructed; 188,379 cubic yards of clay, sand and hardpan were removed.

COLLINGWOOD.

Dredge *Kingsford* worked between May 27 and November 30, 1907, cleaning up the channel and running shoal spots in it and harbour. A start was made to dredge a basin at northerly side of G.T.Ry's Co.'s elevator wharf, where mooring facilities could be provided for vessels drawing not more than 11 feet. The latter is not very far advanced; 26,995 cubic yards of rock, mud, sand, clay and boulders were removed.

DARK CHANNEL (TRENTON).

Dredge *Trenton* worked from July 5 to November 9, 1907, dredging a straight channel 100 feet in width and 14 feet deep from Murray canal to Trenton Harbour. This work is not fully completed; 118,655 cubic yards of rock, mud, sand, clay, gravel and boulders were removed.

FORT WILLIAM.

Dredge *Empire* worked from June 20 to 24, 1907, removing a portion of high bank at Mission turning basin to facilitate work for dredge that was following; 2,188 cubic yards of clay were removed.

Dredging was also performed by dredge *No. 1,* Great Lakes Dredging Co., from July 4 to August 3, 1907, removing rocky shoal between Murphy's coal dock and Mission turning basin in the Kaministiquia river; 11,742 cubic yards of clay, stones and rock were removed.

GODERICH.

From May 14 to June 14, and from July 25 to November 30, 1907, dredge *Arnoldi* dredged a turning basin in inner harbour, a channel between piers, and a channel at outer entrance to piers; 41,594 cubic yards of rock, mud, sand and gravel were removed.

HAMILTON.

From September 5 to November 3, 1907, dredge *Hamil* worked, dredging in harbour and approaches to wharfs and alongside of same in slips, used by Hamilton Steamboat Company, McKay Bros., and other steamboat owners; 52,728 cubic yards of sand, clay and gravel were removed.

HAWKESBURY.

From September 9, to November 16, the departmental dredge *Nipissing* worked, making two cuts to widen and deepen the main channel; 39,005 yards of clay, sand, sawdust were removed.

JEANNETTE'S CREEK.

From August 19 to August 22, 1907, dredge *Ontario* worked, dredging in front of an approach to dock, removing 1,214 cubic yards of clay and sand.

KINCARDINE.

From June 1 to July 2, 1907, dredge *Arnoldi* worked, dredging a channel at outer entrance to and between piers, and also made one cut on south side of inner harbour; 8,000 cubic yards of sand, gravel and mud were removed.

KINGSTON.

The dredge *Sir Richard,* belonging to the department, worked from June 17 to November 9, 1907, deepening alongside and in front of several wharfs, also making three cuts in the channel in the lower harbour; 59,600 cubic yards of clay and quicksand were removed.

LITTLE CURRENT.

From May 28 to November 16, 1907, dredge *No. 14* worked, constructing a channel 300 feet wide, 1,800 feet long and 22 feet deep. This channel is approaching completion; 91,188 cubic yards of rock were removed. This dredge belongs to C. S. Boone.

MEAFORD.

From August 15 to October 31, 1907, the dredge *Togo* worked, dredging in approaches to harbour from near outer breakwater to inner harbour and deepening the latter where necessary; 43,320 cubic yards of clay, sand, gravel and hardpan were removed.

MIDLAND.

The dredging done was the removal of a dangerous shoal in the harbour near the large elevator of G.T.Ry. Co., also alongside the G.T.Ry. Co. wharf in slip east of old elevator, and was performed by three dredges, viz.: Dredge *No. 9,* Canadian Dredging and Construction Co., from May 27 to July 18; dredge *Monarch* from May 25 to May 29, June 3 to June 29, July 1 to July 24, September 23 to October 5, 1907, and by dredge *Excelsior* on May 28 and from June 10 to July 20, 1907, removing 210,614 cubic yards of clay, sand, gravel, boulders and stones in all.

MISSION AND KAMINISTIQUIA RIVERS.

From May 15 to December 3, 1907, dredge *No. 6,* Great Lakes Dredging Co., and from July 25 to August 21, dredge *No. 7,* Great Lakes Dredging Co., worked at widening and deepening the new entrance channel from Thunder bay to Mission river and Grand Trunk Pacific terminal location, removing 616,948 cubic yards of sand and clay.

Dredge *No. 5,* Great Lakes Dredging Co., also worked here from May 16 to December 4, 1907, deepening Mission turning basin to 22 feet below zero, also widening Kaministiquia river over property expropriated by Crown on lot 10, Island No. 2. Several small shoal sections on Kaministiquia river were also removed; 642,685 cubic yards of clay were removed.

Dredging done at commencement of season, consisted in deepening old entrance channel to Kaministiquia river. When this was completed, work was started widening river over properties expropriated by Crown on island No. 1. In September, work done consisted in widening and deepening Mission river near Turning basin. This dredging was done by the dredge *Dominion,* from May 18 to December 4, 1907, and 1,199,524 cubic yards of clay and sand were removed.

Dredge *No. 8*, Great Lakes Dredging Co., also worked here from May 20 to November 29, 1907, completing the dredging in the entrance channels to grade, namely, 22 feet below zero. During the latter portion of season dredging consisted in deepening and widening river channel in Kaministiquia river to West Fort William; 386,141 cubic yards of clay and sand were removed.

NEW LISKEARD.

The dredging was performed by the departmental dredge *Queen* from September 1 to October 31, 1907, and work consisted in making one cut at the wharf and two other cuts near the mouth of the Wabi river to remove refuse coming down this river in the spring; 13,428 cubic yards of clay were removed.

NORTH BAY.

Dredge *Mattawa*, belonging to the department, worked from August 19 to September 21, 1907, making nine cuts alongside the wharf and one cut at the mouth of the South river, running in front of the lighthouse; 12,100 cubic yards of clay, gravel and sand were removed.

OTTAWA.

The dredging consisted of making an approach to the government wharf at foot of Rideau canal locks, and was performed by two departmental dredges, viz.: dredge *Challenge* from November 4 to 30, 1907, and dredge *Nipissing* from November 18 to 23, 1907; 5,005 cubic yards of sand, sawdust and clay were removed.

OWEN SOUND.

From May 14 to August 10, 1907, dredge *Frank* worked, dredging in approaches to harbour and deepening harbour where necessary; 104,373 cubic yards of clay and sand were removed.

PENETANGUISHENE.

From August 13 to October 5, 1907, work was done by dredge *Frank* and consisted in deepening and widening channel to wharfs; 94,400 cubic yards of clay and sand were removed.

POINT EDWARD.

Dredging was performed between May 29 and December 14, 1907, by dredge *St. Lawrence*, and the work performed was part excavation of whole area fronting docks and lying between docks and deep water; 298,475 cubic yards of sand and gravel were removed.

PORT ARTHUR.

Dredge *I.X.L.* worked from May 16 to November 6, 1907, dredging alongside C.N.R. steel dock, in slip at Atikokan Iron Works and alongside C.N.R. elevator A, widening harbour area near south breakwater and deepening harbour in front of C.P.R. and C.N.R. freight sheds; 306,933 cubic yards of clay, sand and boulders were removed.

PORT BURWELL.

Departmental dredge *Ontario* worked from September 1 to November 23, 1907, and the work done was outside and inside of east and west piers; 17,910 cubic yards of sand, boulders and clay were removed.

PORT ELGIN.

From July 5 to 20, dredge *Arnoldi* worked, dredging an entrance channel to dock; 11,020 cubic yards of mud, sand and gravel were removed.

PORT STANLEY.

From August 19 to November 4, 1907, dredge *E. Hall* worked. The work performed consisted of dredging in inner harbour; in channel between piers; a small amount at outer entrance to piers, also berths for 400 feet of breakwater were excavated. The material removed consisted of 36,651 cubic yards of clay and sand.

Work was also done by the departmental dredge *Ontario* from June 10 to August 31, 1907, and the work consisted in making berths for breakwater cribs. This work had to be gone over three or four times on account of the sea washing in sand; 18,990 cubic yards of sand, boulders and clay were removed.

PRESCOTT.

From November 11 to 16, 1907, dredge *Sir Richard,* belonging to the Department of Public Works, worked at this place, dredging in front of wharf and approaches to ferry slip; 9,500 cubic yards of clay and quicksand were removed.

RAINY RIVER.

Dredge *Warrod* worked from October 2 to 19, 1907; the dredging represents work done in improving the steamer channel between Rainy River and Lake of the Woods. Work was also done at the end of Oak Point, and a sandy ridge which is increasing northerly, blocking the steamer channel, was removed; 21,366 cubic yards of sand were removed.

ROCKLIFFE.

Departmental dredge *Nipissing* worked from August 5 to August 24, 1907, cleaning trees and other material which had fallen into main channel through a landslide; 8,550 cubic yards of clay, sand, &c., were removed.

RONDEAU.

From July 7 to August 7, 1907, dredge *E. Hall* worked, dredging a channel at outer entrance to piers, 125 feet wide for a distance of 500 feet and 100 feet wide for an additional 500 feet. Turning basin in inner harbour also enlarged; 18,216 cubic yards of clay and sand were removed.

SAULT STE. MARIE.

Dredge *No. 1,* A. F. Bowman, worked from September 3 to December 17, 1907, dredging an approach to government wharf from the channel to Canadian lock, said channel is some 1,450 feet westerly of westerly end of said wharf. This is being done to enable all steamers to approach the government wharf direct from the canal channel, thus saving a long detour around the shoals; 24,841 cubic yards of rock, clay, stones and boulders were removed.

SOUTH NATION RIVER.

Departmental dredge *Nipissing* worked from August 26 to 31, 1907, making a cut 563 feet long, 30 feet wide, to deepen and widen channel leading into the Ottawa river; 2,745 cubic yards of clay, sand and boulders were removed.

STURGEON FALLS.

From May 20 to August 17, 1907, dredge *Mattawa,* belonging to the department, worked. This work consisted in the continuation of the cuts made in the previous season, also one cut was made 573 feet long and 30 feet wide; 39,700 cubic yards of clay, sand and gravel were removed.

SUMMERSTOWN.

Dredge *Canada* worked from August 29 to November 26, 1907, deepening and widening the main channel below the wharf; 72,700 cubic yards of clay, stones and hardpan were removed.

From November 8 to 25, 1907, dredge *Little Giant* also worked, widening and deepening an old cut, starting from the wharf leading to main channel; 15,160 cubic yards of clay, sand and stones were removed.

SYDENHAM.

The dredge *Ontario* worked in Sydenham river from July 1 to August 7, 1907, making a channel at entrance to Chenal Ecarte river; 7,223 cubic yards of clay and sand were removed.

THAMES RIVER.

The dredge *Meade* worked from April 18 to May 21, 1907. The dredging done was the partial completion of a channel through bar at entrance to river. The channel is 7,000 feet long and 100 feet wide; 28,968 cubic yards of clay and sand were removed.

THESSALON.

The dredging done at Thessalon was the removal of a rocky shoal near westerly end of landing pier and was done by the dredge *Meade* between July 6 and 11 and August 21 and 23, 1907; 6514 cubic yards of rock were removed.

THORAH ISLAND.

The dredging at Thorah island, done on July 10 and 11, 1907, was the construction of a small basin and channel thereto from the lake for the protection and to afford better landing facilities for islanders, &c.; 804 cubic yards of sand and gravel were removed.

THORNBURY.

From May 27 to August 13, 1907, dredge *Togo* worked, deepening the channel to inner harbour and deepening the latter also alongside wharfs; a turning basin has now been constructed; 42,092 cubic yards of hardpan, gravel, clay and sand were removed.

TIFFIN.

The dredging done was the construction of a channel and a slip alongside of Grand Trunk Pacific elevators at Tiffin, and work was done by the following three dredges:—*No. 9,* Owen Sound Dredging and Construction Company, from July 19 to August 10, 1907; dredge *Excelsior,* April 25 to May 27, May 29 to June 8, July 22 to December 7, 1907; and by dredge *Monarch,* from May 30 to June 1, July 25 to September 21, and from October 7 to 22, 1907; 385,161 cubic yards of sand, clay, gravel, boulders, &c., were removed. Dredge *Monarch* also worked from November 28 to December 14.

TORONTO.

Dredge *King Edward* worked from June 20 to November 29, 1907, dredging in eastern channel and in approach thereto from the lake, also some dredging in harbour near R.C.C.C. wharfs; 177,149 cubic yards of sand and clay were removed.

VICTORIA HARBOUR.

Victoria Harbour is situated on an inlet of Georgian Bay, at the easterly end thereof, and is well sheltered and easily approached from the open lake. Population, 1,600.

On June 7 last, a contract was awarded to the Owen Sound Dredging and Construction Co., of Owen Sound, to perform certain dredging, for which they were to be paid the following prices per cubic yard, scow measurement: rock, $2; all other materials, 8 cents.

Work was commenced on August 14 last and closed for the season on December 2, during which time the dredge removed 124,100 cubic yards of clay and sand.

The work consists in widening and deepening the approaches to the lumber wharfs on the east side of the harbour, 230 feet in width by 1,584 feet in length, also increasing the width of the channel dredged in 1903-4, by dredging a strip 66 feet wide, along the northeasterly side of same, 1,400 feet long.

On the west side of the harbour, at proposed C.P.R. wharfs and elevator, on November 20 last, some 5,400 cubic yards were also removed.

Total expenditure for fiscal year 1907-8, $10,418.55.

WAUBAUSHENE.

Waubaushene, with a population of about 1,200, and Fesserton with a population of about 300 are situated on Matchedash bay, an arm of the Georgian bay, at the southeasterly end thereof.

On May 21 last, authority was given to perform certain dredging in Matchedash bay between these places, for which a contract was awarded on June 29 last to Mr. A. F. Bowmon, of Southampton, at the following prices per cubic yard, scow measurement: rock, $2; all other materials, 13 cents.

Work was commenced on June 8 and closed for the season on November 30, and consists in dredging a channel in Matchedash bay, 100 feet wide on the bottom with an average depth of 14 feet at low water, also excavating a turning basin 300 feet square at Fesserton.

In doing the above work, some 124,980 cubic yards of mud were removed. The expenditure for the fiscal year 1907-8, $16,600.36.

WIARTON.

The dredge *Frank* worked from October 12, 1907, to January 11, 1908, dredging between the government breakwater and town wharf and alongside both; 124,200 cubic yards of clay and sand were removed.

WINGFIELD BASIN.

The dredge *No. 1,* C. S. Boone, worked from July 25 to October 28, 1907, constructing a channel from lake to harbour which when completed is to be 100 feet wide in bottom and about 600 feet long and 14 to 18 feet deep; 23,320 cubic yards of hardpan, boulders, gravel, clay and rock were removed.

ANNUAL Report from April 1, 1907, to March 31, 1908.

DREDGE, 'ALGONQUIN.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Saguenay River	Sept. 5	Oct. 31	15 25 feet.	32,522	11,294 68	$34\frac{18}{25}$

Total expenditure, $11,294.68. Total cubic yards removed, 32,522.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages						60 00	67 50				127 50
Contingencies						2,357 44	8,809 74				11,167 18
Totals						2,417 44	8,877 24				11,294 68

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay						6,611	25,911						32,552

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

SAGUENAY RIVER.—The work performed consisted in deepening and widening the main channel in front of the wharf.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'CENTRAL CITY.' OWNER, L. COHEN & SON.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
St. Placide	May 30	Nov. 22	9 feet.	131,950	29,112 13	$22\frac{1}{2}$

Total expenditure, $29,112.13. Total cubic yards removed, 131,950.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		5 00	52 50	67 50	75 00	75 00	81 00	57 00			413 00
Contingencies		228 38	2,436 00	4,872 00	4,872 00	4,986 19	6,622 87	4,681 69			28,699 13
Totals		233 38	2,488 50	4,939 50	4,947 00	5,061 19	6,703 87	4,738 69			29,112 13

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	To als.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		1,050	11,200	22,400	22,400	22,925	30,450	21,525					131,905

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

ST. PLACIDE.—A new channel was made from the wharf out to main channel. Two cuts were made.

Annual Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'CANADA.' OWNER, L. COHEN & SON.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Dorion	May 28	Aug. 9	8- 9 feet.	20,578	16,457 40	$79\frac{24}{25}$
Summerstown	Aug. 29	Nov. 26	9-12 "	72,700	17,656 25	$24\frac{7}{25}$

Total expenditure, $34,113.65. Total cubic yards removed, 93,278.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		10 00	62 50	81 00	27 00	90 00	81 00	37 25			388 75
Contingencies		575 75	5,238 80	6,539 85	3,922 50	5,721 60	5,275 20	6,451 20			33,724 90
Totals		585 75	5,301 30	6,620 85	3,949 50	5,811 60	5.356 20	6,488 45			34,113 65

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		1,645	14,968	1,296	2,540	21,300	21,980	26,880					90,609
Rock				1,623	1,046								2,669
Totals		1,645	14,968	2,919	3,586	21,300	21,980	26,880					93,278

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

Dorion.—Work performed consisted in cleaning out and making an approach to the village.
Summerstown.—Work consisted in deepening and widening main channel below the wharf.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'CHATEAUGUAY.' OWNER, L. COHEN & SON.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Point Cavagnale	May 28	July 24	9 feet	37,940	10,016 90	$26\frac{4}{5}$
Isle au Foin	July 29	August 10	9 "	12,860	3,108 90	$24\frac{1}{5}$
Port St. Francis	August 12	September 14	14 "	19,725	4,804 00	$24\frac{7}{25}$
River Maskinonge	September 16	November 19	8 "	46,620	9,501 25	$20\frac{3}{25}$

Total expenditure, $27,431.05. Total cubic yards removed, 117,145.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		10 00	62 50	63 00	62 50	67 50	78 00	61 75			405 25
Contingencies		382 20	5,005 00	4,494 20	6,038 40	4,362 00	4,476 00	2,268 00			27,025 80
Totals		392 20	5,067 50	4,557 20	6,100 90	4,429 50	4,554 00	2,329 75			27,431 05

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Total.
	Cub. yds.	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		1,470	19,250	20,090	22,290	20,325	22,380	11,340					117,145

NATURE OF DREDGING PERFORMED AT DIFFERENT LOCALITIES.

POINT CAVAGNALE.—Work consisted in making a cut from the main channel to the shore.
ISLE AUX FOIN.—A cut was made from the head of this island toward the wharf, starting from the main channel.
PORT ST. FRANCIS.—Dredging consisted in cleaning and deepening the approaches to and around the wharf.
RIVER MASKINONGE.—Work at this place consisted in widening and deepening the channel leading to the village.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'CAPITAL.' OWNER, TURCOTTE & DUFRESNE.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Becancour River.	June 8.	November 4	8 ft.—14 ft.	101,962	15,411 41	15 1/16

Total expenditure, $15,411.41. Total cubic yards removed, 101,962.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			50 00	67 50	68 00	62 50	30 00	40 82			318 82
Contingencies			1,785 92	3,160 75	4,900 80	3,152 96	833 92	1,258 24			15,092 59
Totals			1,835 92	3,228 25	4,968 80	3,215 46	863 92	1,299 06			15,411 41

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Total.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand			16,743	24,287	28,150	16,965	7,953	7,864					101,962

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BECANCOUR RIVER.—Work consisted in making a channel from the Main Channel in the St. Lawrence River to the entrance of this river.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'DUKE OF YORK.' OWNER, W. J. POUPORE CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
River Batiscan	May 17	May 25	12 feet	4,680	522 60	11 $\frac{4}{10}$
River St. Francis	May 23	June 1	9 "	3,640	416 60	11 $\frac{4}{10}$
River Yamaska	June 3	November 30	8 ft.—9 ft.	334,710	35,568 00	10 $\frac{31}{100}$

Total expenditure, $36,507.20. Total cubic yards removed, 343,030.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		16 20	62 50	68 00	67 50	62 50	69 75	67 30			413 75
Contingencies		923 00	4,546 70	7,504 35	7,152 60	6,224 90	6,755 70	2,986 20			36,093 45
Totals		939 20	4,609 20	7,572 35	7,220 10	6,287 40	6,825 45	3,053 50			36,507 20

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Total.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		7,020	57,200	66,300	60,580	61,620	58,070	32,240					343,030

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIVER BATISCAN.—Dredging consisted in removing a shoal in front of the Richelieu wharf.
RIVER ST. FRANCIS.—A shoal which had filled in the main channel was removed.
RIVER YAMASKA.—Work was performed in the channel near the mouth of the river.

ANNUAL Report from April 1, 1907 to March 31, 1908.—*Continued.*

DREDGE 'HURON.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was performed	Date. From.	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	cts.
Chateauguay River ...	May 31	November 30	6 feet 7 feet	130,030	29,092 60	$22\frac{2}{5}$

Total expenditure, $29,092.60. Total cubic yards removed, 130,030.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		15 00	75 00	81 00	81 00	75 00	81 00	78 00			486 00
Contingencies			4,188 80	3,955 66	5,038 00	4,985 20	4,791 60	5,647 40			28,606 60
Totals		15 00	4,263 80	4,036 60	5,119 00	5,060 20	4,872 60	5,725 40			29,092 60

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Gravel		450	18,590	17,980	22,900	22,660	21,780	25,670					130,030

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

CHATEAUGUAY RIVER—Dredging at this place consisted in cleaning out the mouth of the St. Louis River and improving the channel to the Chateauguay River.

ANNUAL Report from April 1, 1907 to March 31, 1908.—*Continued.*

DREDGE 'IROQUOIS.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	cts.
Chicoutimi	July 3	August 10		6,490	2,404 10	·37
Chicoutimi Wharf	October 10	October 26	12 feet 25 feet.	2,050	752 00	·36$\frac{7}{17}$
Rimouski	August 21	September 30	15 feet	4,170	2,613 70	·62$\frac{17}{17}$

Total expenditure, $5,769.80. Total cubic yards removed, 12,710.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			62 50	67 50	67 50	62 50	62 50				322 50
Contingencies				1,297 10	1,790 95	1,662 25	697 00				5,447 30
Totals			62 50	1,364 60	1,858 45	1,724 75	759 50				5,769 80

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				3,815	4,120	2,725	2,050						12,710

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

CHICOUTIMI—Work consisted in deepening the channel leading into the main channel. Dredging was also done deepening around the wharf.
RIMOUSKI—The channel from the wharf leading to the main channel was deepened and widened.

ANNUAL Report from April 1, 1907 to March 31, 1908.—*Continued.*

DREDGE 'LITTLE GIANT.' OWNER, L. COHEN & SON.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	cts.
Sorel	May 27	November 2	6 feet—18 feet	157,270	30,485 30	·19$\frac{3}{25}$
Summerstown	November 8	November 25	9 feet—11 feet	15,160	3,675 65	·23$\frac{6}{25}$

Total expenditure, $34,164.95. Total cubic yards removed, 172,430.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		15 00	75 00	78 00	81 00	75 00	84 00	37 25			445 25
Contingencies		418 00	5,080 60	5,822 10	6,545 50	6,446 70	5,768 40	3,638 40			33,719 70
Totals		433 00	5,155 60	5,900 10	6,626 50	6,521 70	5,852 40	3,675 65			34,164 95

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay and stones		2,200	26,740	29,590	34,450	33,930	29,820	15,700					172,430

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

SOREL—Work consisted in dredging alongside the wharf to allow small boats to land, as well as giving them a shelter.

SUMMERSTOWN—Dredging performed consisted in widening and deepening an old cut starting from the wharf leading to main channel.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'MOHAWK.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Berthierville	May 29.	Nov. 30.	6-12 feet.	104,737	17,919 70	17 1/10

Total expenditure, $17,919.70. Total cubic yards removed, 104,737.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		14 20	75 00	81 00	81 00	100 00	108 00	92 00			551 20
Contingencies		283 80	3,898 65	2,345 45	2,140 98	2,499 75	3,598 65	2,601 22			17,368 50
Totals	298 00	3,973 65	2,426 45	2,221 98	2,599 75	3,706 65	2,693 22				17,919 70

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		1,720	23,430	14,050	12,812	15,150	21,810	15,765					104,737

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BERTHIERVILLE.—The work consisted in making a new channel from the main channel toward the town, passing at the foot of Isle aux Foin. A cut was also made to deepen the channel in front of the Bayonne river.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'MOHICAN.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
River Jesus	July 10	Aug. 19	8 9 feet.	18,321	5,353 17	·29⅞
	Sep.. 19	Nov. 16				
Berthierville	Sept. 11	Sept. 14	9 feet.	945	155 92	·16⅜

Total expenditure, $5,509.09. Total cubic yards removed, 19,266.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				57 00	72 00	41 00	81 00	54 00			305 00
Contigencies				970 92	416 63	424 04	2,251 25	1,141 25			5,204 09
Totals				1,027 92	488 63	465 04	2,332 25	1,195 25			5,509 09

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				3,531	1,515	1,920	8,150	4,150					19,266

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIVER JESUS.—A cut was made in the main channel at the Jesus flats, continuing the work done the previous season.
BERTHIERVILLE.—The channel was widened and deepened at the foot of Isle au Foins.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'No. 2.' OWNER, DOMINION DREDGING CO.

Localities where Dredging was performed.	Date.		Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
	From	To				
					$ cts.	Cts.
St. Andrews	May 23	July 31	8–10 feet.	42,363	9,916 75	$23\frac{3}{8}$
Vaudreuil	August 5	Oct. 29	9 feet.	35,134	6,081 67	$17\frac{3}{10}$

Total expenditure, $15,998.42. Total cubic yards removed, 77,497.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		24 00	75 00	81 00	72 70	81 50	81 50				415 20
Contingencies		1,012 50	5,861 25	2,863 00	2,547 00	1,408 68	1,890 79				15,583 22
Totals		1,036 50	5,936 25	2,944 00	2,619 70	1,490 18	1,971 79				15,998 42

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		4,050	23,445	14,868	16,150	8,526	10,438						77,497

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

ST. ANDREWS.—Work was performed deepening and widening the channel below the rapids.
VAUDREUIL.—A channel was made, starting at the bay leading towards the wharf.

ANNUAL Report from April 1, 1907, to March, 31, 1908—*Continued.*

DREDGE, 'No. 1' T. F. M. OWNER, T. F. MOORE CO.

Localilties where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Blanche Shoals	July 8	Nov. 9.	12 feet	50,050	10,993 50	$21\frac{24}{25}$

Total expenditure, $10,993.50. Total cubic yards removed, 50,050.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February, and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			66 00	81 00	81 00	75 00	81 00	24 00			408 00
Contingencies				1,207 50	2,310 00	2,782 50	3,150 00	1,135 50			10,585 50
Totals			66 00	1,288 50	2,391 00	2,857 50	3,231 00	1,159 50			10,993 50

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.
Clay				5,750	11,000	13,250	15,000	5,050					50,050

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BLANCHE SHOALS.—Dredging consisted in removing shoals which form in the channel. Several cuts were made to widen channel as well as deepening it.

ANNUAL REPORT FROM APRIL 1, 1907, TO MARCH 31, 1908—*Continued.*

DREDGE, 'No. 6.' OWNER, ST. LAWRENCE & GREAT LAKES DG. CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
River Du Loup En Haut	May 31	Sept. 14	6½ 8 feet	98,540	12,709 17	12 9/16
St. Pierre Les Becquets	Sept. 16	Nov. 16	8 feet	41,396	3,743 15	09

Total expenditure, $16,452.32. Total cubic yards removed, 139,936.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February, and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			69 50	67 50	67 00	63 00	81 00	42 00			390 00
Contingencies			3,285 97	3,435 60	4,008 70	2,931 04	1,910 33	490 18			16,062 32
Totals			3,355 47	3,503 10	4,075 70	2,994 04	1,991 33	532 18			16,452 32

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.
Clay and stones		700	23,110	29,690	32,580	26,152	22,048	5,656					139,936

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIVER DU LOUP EN HAUT.—Dredging done consisted in deepening the channel in front of the village wharf and also at Tourville Mills below the wharf.
ST. PIERRE LES BECQUETS.—A cut was made from the main channel towards the village, deepening and widening.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'No. 5.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
River Ouelle	July 19	Sept 14	12—13 feet	35,925	24,923 25	69.3/25

Total expenditure, $24,923.25. Total cubic yards removed, 35,925.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February, and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				35 00	67 50	32 50					135 00
Contingencies				4,036 50	14,231 25	6,520 50					24,788 25
Totals				4,071 50	14,298 75	6,553 00					24,923 25

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.
Clay				4,650	21,825	9,450							35,925

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIVER OUELLE.—Work done at this place consisted in deepening and widening the channel.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 3.' OWNER, DOMINION DREDGING CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Hudson	June 22	August 1	6–9 feet.	19,396	3,620 88	$18\frac{55}{56}$
St. Andrews	August 5	October 26	10 "	53,450	13,518 31	$25\frac{7}{26}$

Total expenditure, $17,139.19. Total cubic yards removed, 72,846.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			48 60	81 00	81 00	75 00	81 00				366 80
Contingencies			129 60	3,361 68	4,152 50	6,643 13	2,474 38	11 30			16,772 59
Totals			178 20	3,442 68	4,233 50	6,718 13	2,555 38	11 30			17,139 19

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay			720	17,066	18,590	$26,572\frac{1}{2}$	$9,897\frac{1}{2}$						72,846

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

HUDSON.—Dredging performed consisted in deepening and widening the channel in front of the wharf.
ST. ANDREWS.—The work performed consisted of deepening and widening the channel at the entrance to the river

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 5 McDONALD.' OWNER, ANT. ST. PIERRE.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
St. Maurice River	June 4	July 9	14 feet.	33,660	2,806 80	$\cdot 08\frac{8}{25}$
Godfroye River	Sept. 23	October 31	12 "	56,550	6,303 00	$\cdot 11\frac{7}{50}$

Total expenditure, $9,109.80. Total cubic yards removed, 90,210.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		18 00	75 00	21 00		17 50	65 00				196 50
Contingencies			2,064 80	628 00		1,204 50	5,016 00				8,913 30
Totals		18 00	2,139 80	649 00		1,222 00	5,081 00				9,109 80

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	Febrnary.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.
Clay			25,810	7,850		10,950	45,600						90,210

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

ST. MAURICE RIVER.—The work consisted in deepening and widening the western channel near the wharfs.
GODFROYE RIVER.—The turning basin, near the wharf, was widened and deepened.

Annual Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 2,' T. F. M. OWNER, T. F. MOORE CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Blanche Shoals	July 8	Nov. 9	12 feet.	54,601	11,826 21	21 13/20

Total expenditure, $11,826.21. Total cubic yards removed 54,601.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				65 00	81 00	78 00	81 00	55 00			360 00
Contingencies				792 96	3,251 85	3,471 30	2,912 70	1,037 40			11,466 21
Totals				857 96	3 332 85	3,549 30	2,993 70	1,092 40			11,826 21

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				3,776	15,485	16,530	13,870	4,940					54,601

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

Blanche Shoals.—Work at this place consisted in removing shoals which form in the channel. Several cuts were made to widen channel as well as deepening it.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'ONEIDA.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
Rimouski	July 6	Aug. 23	15 feet.	6,313½	3,476 76	.55
River Jesus	Sept. 20	Nov. 28	9-10 "	29,185	8,259 88	.28 5/10

Total expenditure, $11,736 64. Total cubic yards removed, 35,498.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				60 00	67 50	75 00	81 60	78 00			361 50
Contingencies				2,033 13	1,316 13	973 50	3,422 38	3,630 00			11,375 14
Totals				2,093 13	1,383 63	1,048 50	3,503 38	3,708 00			11,736 64

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				3,333	2,980	3,540	12,445	13,200					35,498

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIMOUSKI.—Dredging done consisted in making a channel from the wharf out to deep water.

RIVER JESUS.—Work done consisted in widening and deepening the channel at the entrance to this river. A cut was also made in front of the Jesus Flats.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'OTTAWA.' OWNER, L. COHEN & SON.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
Port St. Francis	Sept. 23 Nov. 4	Nov. 4 Nov. 23	14 feet	48,040	11,677 10	.24$\frac{3}{10}$

Total expenditure, $11,677.10. Total cubic yards removed, 48,040.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages						30 00	67 50	50 00			147 50
Contingencies						710 40	7,094 10	3,724 80			11,529 60
Totals						740 40	7,161 90	3,774 80			11,677 10

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand						2,960	29,560	15,520					48,040

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

PORT ST. FRANCIS.—Work consisted in deepening and cleaning around the wharf at this place, as the channel had filled in with sand.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'OTTAWA.' OWNER. ST. LAWRENCE & GREAT LAKES DG. CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
St. Pierre les Becquets	July 2	Sept. 23	8 feet.	84,362	8,563 81	$10\frac{3}{20}$
Nicolet River	Nov. 2 only.		10 "	400	52 00	13

Total expenditure, $8,615.81. Total cubic yards removed, 84,762.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			18 40	65 00	67 50	69 25					220 15
Stores and equipment				28 75							51 15
Contingencies				2,905 60	2,960 07	2,426 84		22 40			8,344 51
								52 00			
Totals			18 40	2,999 35	3,027 57	2,496 09		74 40			8,615 81

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				30,220	34,120	19,422		400					84,162
Rock				600									600
Totals				30,820	34,120	19,422		400					84,762

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

ST. PIERRE LES BECQUETS.—A cut 3,400 feet long was made from the main channel to this place.

NICOLET RIVER.—Work consisted in dredging the channel at the entrance to this river, widening and deepening it.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'PRINCE LOUIS.' OWNER, W. J. POUPORE CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
River St. Francis	May 20	Nov. 6	6½-10 feet	320,016	32,395 28	.10 3/16

Total expenditure, $32,395.28. Total cubic yards removed, 320,016.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		29 00	62 50	67 30	67 50	69 50	76 50	23 25			395 55
Contingencies		2,200 00	6,008 75	6,331 75	6,022 61	3,238 67	5,926 07	2,271 88			31,999 73
Totals		2,229 00	6,071 25	6,399 05	6,090 11	3,308 17	6,002 57	2,295 13			32,395 28

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand		18,625	56,000	74,325	69,231	55,835	41,500	4,500					320,016

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIVER ST. FRANCIS.—The work done consisted in widening and deepening the channel at different places from half mile below the wharf as far as the entrance to this river. Work was also done in front of the Indian village, deepening the channel.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'PREMIER.' OWNER, GENERAL CONSTRUCTION CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
Rimouski	Sept. 2	Oct. 29	15 feet	7,791	$ cts. 4,847 51	$ cts. .62⅛

Total expenditure, $4,847.51. Total cubic yards removed, 7,791.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages						62 50	32 50				95 00
Contingencies						1,016 26	3,736 25				4,752 51
Totals						1,078 76	3,768 75				4,847 51

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay						1,666	6,125						7,791

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIMOUSKI.—A channel was made, starting from the wharf going towards the main channel.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'PREMIER.' OWNER, FRANK GILBERT.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
L'Assomption	June 3	July 27th	11-14½ feet	52,030	8,481 16	.16 3/10

Total expenditure, $8,481.16. Total cubic yards removed, 52,030.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		78 00		78 36							156 36
Contingencies		5,016 00		3,308 80							8,324 80
Totals		5,094 00		3,387 16							8,481 16

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay			31,350	20,680									52,030

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

L'ASSOMPTION.—The dredging performed consisted in widening and deepening the channel at the head of Gaudry's Island. Also removing a shoal at the entrance of the river.

Annual Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'PONTIAC.' OWNER, W. J. POUPORE CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
River Batiscan	May 27	July 12	12 feet.	33,345	4,014 52	12$\frac{5}{6}$
Richelieu and Ontario Navigation Co. wharf, Batiscan	July 15	Nov. 19		129,390	13,854 42	10$\frac{7}{16}$

Total expenditure, $17,868.94. Total cubic yards removed, 162,735.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		48 15	66 95	67 64	68 80	63 25	72 59	41 62			429 00
Stores and equipment					3 50						3 50
Contingencies		382 38	2,444 30	1,005 10	5,097 24	2,952 61	3,860 33	1,694 48			17,436 44
Totals		430 53	2,511 25	1,072 74	5,169 54	3,015 86	3,932 92	1,736 10			17,868 94

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		2,565	22,040	24,985	32,300	29,355	34,295	17,195					162,735

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

River Batiscan.—Dredging was done 3½ miles from the entrance to this river. Small sand shoals were removed from the channel at different places which had filled in.

Richelieu and Ontario Navigation Co. Wharf (Batiscan).—Work was performed deepening in front of the wharf. Seven cuts were made to remove a sand shoal which had formed at this place.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'PRINCE ARTHUR.' OWNER, L. COHEN & SON.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Maskinonge	Nov. 6	Nov. 30	8 feet	28,572	3,864 60	13 13/25

Total expenditure, $3,864 60. Total cubic yards removed, 28,572.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages								55 00			55 00
Contingencies								3,809 60			3,809 60
Totals								3,864 60			3,864 60

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub yds.	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay								28,572					28,572

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MASKINONGE.—Work performed consisted in deepening and widening the channel about 7 miles from the entrance.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'ST. PIERRE.' OWNER, ANTOINE ST. PIERRE.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
St. Maurice River	May 23	May 29	10 14 feet.	146,440	12,089 20	$\cdot 08\frac{1}{4}$
"	July 5	Aug. 10				
"	Aug. 13	Nov 16				
Cap de la Madelaine	July 2	July 5	8 "	5,130	663 75	$\cdot 12\frac{47}{50}$
Godfroye River	May 30	" 1	8 "	29,820	3,372 20	$\cdot 11\frac{3}{10}$
"	Aug. 12 only					

Total expenditure, $16,116.15. Total cubic yards removed, 181,390.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		34 50	62 50	103 50	81 00	75 00	81 00	42 00			479 50
Contingencies		651 60	2,699 40	2,575 15	2,950 50	2,577 60	3,211 20	967 20			15,636 65
Totals		686 10	2,761 90	2,682 65	3,031 50	2,652 60	3,292 20	1,009 20			16,116 15

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		5,640	25,830	28,960	36,510	33,570	37,500	13,380					181,390

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

ST. MAURICE RIVER.—Dredging consisted in deepening and widening the western channel opposite Grant's saw mill.

CAP DE LA MADELAINE.—Operations were performed cleaning and deepening around the wharf.

GODFROYE RIVER.—The work done consisted in cleaning out and deepening the channel.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'ARNOLDI.' OWNER, W. L. HORTON.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Goderich	May 14	June 14	20–22 feet.	41,594	27,846 58	.66 19/20
	July 25	Nov. 30	"			
Kincardine	June 18	July 2	14 feet.	8,000	2,036 00	.25 5/20
Port Elgin	July 5	July 20	13 "	11,020	2,800 00	.25 5/5

Total expenditure, $32,685.58. Total cubic yards removed, 60,614.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		57 00	78 00	63 00	81 00	75 00	81 00	82 40			517 40
Contingencies		1,225 00	3,482 50	4,693 75	4,275 00	4,107 00	8,565 18	5,819 75			32,168 18
Totals		1,282 00	3,560 50	4,756 75	4,356 00	4,182 00	8,646 18	5,902 15			32,685 58

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Gravel								4,687					4,687
Sand		4,900				7,324	2,865						15,089
Mud			13,250	12,730	10,492								36,472
Rock				260	413	569	1,962	1,162					4,366
Totals		4,900	13,250	12,990	10,905	7,893	4,827	5,849					60,614

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

GODERICH.—Dredging turning basin in inner harbour, channel between piers and also channel at outer entrance to piers.
KINCARDINE.—Dredging channel at outer entrance to and between piers, as also one cutting on south side of inner harbour.
PORT ELGIN.—Dredging of entrance channel to dock.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'CHIEF.' OWNER, W. E. PHIN.

Locality where Dredging was performed.	Date. From.	Date. To.	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Cobourg	June 7	Nov. 4	20-23 feet.	188,379	21,538 58	.11 21/50

Total expenditure, $21,538,58. Total cubic yards removed, 188,379.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			87 00	163 29	162 20	156 70	162 20	85 50			816 89
Contingencies			2,496 12	4,674 78	5,170 77	4,062 85	2,610 74	1,706 13			20,721 69
Totals			2,583 12	4,838 07	5,332 97	4,219 55	2,772 91	1,791 93			21,538 58

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay			22,692	42,498	47,007	36,935	23,734	15,513					188,379

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

COBOURG.—Dredging in inner harbour and approaches thereto. The channel in lake as at present dredged is 150 ft. in width. The car ferry slip was also constructed.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'DOMINION.' OWNER, GREAT LAKES DREDGING CO.

Localities where Dredging was performed.	Date. From.	Date. To.	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Mission and Kaministiquia Rivers	May 18	Dec. 4	22 feet.	1,199,524	129,308 53	.10$\frac{7}{8}$

Total expenditure, $129,308,53. Total cubic yards removed, 1,199,524.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	cts.	$ cts.	$ cts.	$ cts.
Wages		28 00	100 00	108 00	108 00	100 00	108 00	104 00	12 00		668 00
Contingencies		6,020 03	15,787 06	23,310 60	24,825 99	17,916 54	25,921 87	14,380 81	477 63		128,640 53
Totals		6,048 03	15,887 06	23,418 60	24,933 99	18,016 54	26,029 87	14,484 81	489 63		129,308 53

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.
Clay		60,353	159,826	222,998	240,746	152,868	234,115	123,311	5,307				1,199,524

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MISSION AND KAMINISTIQUIA RIVERS.—Dredging done at commencement of season consisted in deepening old entrance channel to Kaministiquia River. When this was completed work was started widening river over properties expropriated by Crown on Island No. 1.

In September, work done consisted in widening and deepening Mission River near turning basin.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'EMPIRE.' OWNER, GREAT LAKES DREDGING CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Fort William	June 20.	June 24.	22 feet	2,188	278 56	$12\frac{18}{25}$

Total expenditure, $278.56. Total cubic yards removed, 2,138.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			16 00								16 00
Contingencies			262 56								262 56
Totals			278 56								278 56

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay			2,188										2,186

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

FORT WILLIAM.—Work performed consisted in removing portion of high bank at Mission turning basin to facilitate work for dredge that was following.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'E. HALL.' OWNER, CANADA CONSTRUCTION AND DREDGING CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Rondeau	July 8	August 7	20 feet.	18,216	2,926 73	$16\frac{3}{5}$
Port Stanley	August 19	November 4	19 "	36,651	5,946 48	$16\frac{6}{25}$

Total expenditure, $8,873.21. Total cubic yards removed, 54,867.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				79 25	96 00	84 00	81 00	28 66			368 91
Contingencies				2,010 66	2,357 08	2,218 36	1,797 30	120 90			8,504 30
Totals				2,089 91	2,453 08	2,302 36	1,878 30	149 56			8,873 21

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				12,972	15,207	14,312	11,596	780					54,867

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RONDEAU.—Channel at outer entrance to piers, dredged 125 ft. for a distance of 500 ft., and 100 ft. wide for an additional 500 ft. Turning basin in inner harbour also enlarged.

PORT STANLEY.—Berths for 400 ft. of breakwater were excavated and dredging performed in inner harbour, in channel between piers, and a small amount at outer entrance to piers.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'EXCELSIOR.' OWNER, CANADIAN DREDGING AND CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Midland Harbour	(May 28 only) (June 10.....)	July 20.....	22-24 feet.	64,964	16,629 02	$25\frac{23}{50}$

Total expenditure, $16,629.02. Total cubic yards removed, 64,964.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			36 25	63 53							99 78
Contingencies			10,105 94	6,423 30							16,529 24
Totals			10,142 19	6,486 83							16,629 02

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Boulders, clay, stones and sand		1,390	38,869	24,705									64,964

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MIDLAND HARBOUR.—Removal of dangerous shoal in harbour near the large elevator of G. T. Ry. Co.; also, alongside the G. T. Ry. Co.'s wharf, in slip, east of old elevator.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'EXCELSIOR.' OWNER, OWEN SOUND DREDGING & CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Tiffin	April 25 May 29 July 22	May 27 June 8 Dec. 7	12-25 feet.	197,251	69,160 15	35$\frac{3}{5}$

Total expenditure, $69,160.15. Total cubic yards removed, 197,251.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	15 36	32 47	.....	.....	55 37	76 29	81 36	78 18	51 12	.....	390 15
Contingencies	1,759 68	10,751 76	3,998 70	7,271 10	11,031 12	6,854 31	10,885 80	10,604 49	5,613 04	.....	68,770 00
Totals	1,775 04	10,784 23	3,998 70	7,271 10	11,086 49	6,930 60	10,967 16	10,682 67	5,664 16	.....	69,160 15

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds
Clay	1,584	30,468	14,810	26,930	43,274	35,314	16,311	9,987	6,249	.....	.....	.....	184,927
Rock	666	1,082	.....	.....	.....	.....	4,208	3,954	2,414	.....	.....	.....	12,324
Totals	2,250	31,550	14,810	26,930	43,274	35,314	20,519	13,941	8,663	.....	.....	.....	197,251

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

TIFFIN.—Construction of a channel to and a slip alongside of G. T. Pac. Elevators at Tiffin.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'FRANK.' OWNER, A. F. BOWMAN.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Owen Sound	May 11	Aug. 10	23 feet	104,373	20,785 05	$19\frac{3}{10}$
Penetanguishene	Aug. 13	Oct. 5	20 "	94,400	13,375 05	$14\frac{1}{25}$
Wiarton	Oct. 12	Jan. 11	$16\frac{1}{2}$ "	124,200	25,077 60	$20\frac{9}{50}$

Total expenditure, $59,237.70. Total cubic yards removed, 322,973.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		52 00	75 65	81 00	82 00	76 15	78 90	78 00	78 00	30 60	632 30
Contingencies		4,401 00	7,211 40	6,615 00	6,410 00	7,868 00	8,380 00	8,040 00	6,600 00	3,080 00	58,605 40
Totals		4,453 00	7,287 05	6,696 00	6,492 00	7,944 15	8,458 90	8,118 00	6,678 00	3,110 60	59,237 70

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		22,005	37,683	33,075	40,810	56,200	41,600	40,200	33,000	15,400			322,973
Totals													

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

OWEN SOUND.—Dredging in approaches to harbour and deepening harbour where necessary.
PENETANGUISHENE.—Deepening and widening channel leading to wharfs.
WIARTON.—Dredging between the Government breakwater and town wharf and alongside both.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'HAMIL.' OWNER, W. E. PHIN.

Localities where Dredging was performed.	Date. From.	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Bronte	July 8	Aug. 31	10-11 feet.	52,826	9,142 42	$17\frac{3}{16}$
Hamilton	Sept. 5	Nov. 3	16 "	52,728	6,585 46	$12\frac{3}{16}$

Total expenditure, $15,727.88. Total cubic yards removed, 105,554.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				81 00	99 00	75 00	85 90	79 20			420 10
Contingencies				3,819 56	5,160 86	1,847 04	2,221 44	2,258 88			15,307 78
Totals				3,900 56	5,259 86	1,922 04	2,307 34	2,338 08			15,727 88

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December.	Jannary.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				22,468	30,358	15,392	18,512	18,824					105,554
Totals													

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BRONTE.—Dredging in channel between the piers and a turning basin at the mouth of 12 Mile Creek, which empties here, also a channel to a point about 500 ft. up stream to where a small marine railway is used for hauling out small vessels. This cut is 100 feet wide and affords splendid protection for boats using the harbour.

HAMILTON.—Dredging in harbour and approaches to wharfs and alongside of same in slips, used by Hamilton Steamboat Company, McKay Bros. and other steamboat owners.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'I. X. L.' OWNER, R. WEDDELL.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Port Arthur	May 16	Nov. 6	22 feet.	306,933	30,135 71	9.82

Total expenditure, $30,135.71. Total cubic yards removed, 306,933.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		56 00	100 00	108 00	108 00	106 00	108 00	32 00			612 00
Contingencies		2,722 65	5,052 14	5,542 20	5,832 21	4,700 03	4,897 16	777 29			29,523 71
Totals		2,778 65	5,152 14	5,650 20	5,940 21	4,800 03	5,005 16	809 29			30,135 71

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		26,838	51,159	58,339	61,392	49,474	51,549	8,182					306,933

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

PORT ARTHUR—Dredging alongside C.N.R. steel dock; slip at Atikokan Iron Works; alongside C.N.R. elevator A; widening harbour area near south break water, and deepening harbour in front of C.P.R. and C.N.R. freight shed wharfs.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'KING EDWARD.' OWNER WINDSOR DREDGING CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Belle River	May 3	May 30	9 feet.	11,050	3,181 00	$28\frac{59}{100}$
Toronto	June 20	Nov. 29	10-25 "	177,149	23,762 16	·13

Total expenditure, $26,943.16, Total cubic yards removed, 188,199.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		81 00	35 00	67 50	72 75	62 50	69 00	78 00			465 75
Repairs		5 00									5 00
Contingencies		3,095 00	378 00	4,266 00	5,022 00	3,523 50	5,670 00	4,517 91			26,472 41
Totals		3,181 00	413 00	4,333 50	5,094 75	3,586 00	5,739 00	4,595 91			26,943 16

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		11,050											11,050
Sand			2,800	31,600	37,200	29,150	42,000	34,399					177,149
Totals													188,199

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BELLE RIVER—The completion of an entrance channel to harbour, 1,200 ft. long and 75 ft. wide.
TORONTO—Dredging in Eastern Channel and in approach thereto from the lake, also some dredging in harbour near R. C. C. C. wharfs.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'KINGSFORD.' OWNER, C. S. BOONE DREDGING & CONSTRUCTION CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Collingwood	May 27	Nov. 30	22 feet.	26,995	26,487 34	98$\frac{3}{25}$

Total expenditure, $26,487.34. Total cubic yards removed, 26,995.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		15 00	89 38	97 00	94 50	90 49	95 92	98 70			580 99
Contingencies			3,589 55	4,667 00	2,817 00	540 00	5,745 30	8,547 50			25,906 35
Totals		15 00	3,678 93	4,764 00	2,911 50	630 49	5,841 22	8,646 20			26,487 34

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Boulders			1,050	1,515	160	40	1,363	1,073					5,201
Clay		1,100	4,278	3,660	3,400	660	2,486	356					15,940
Rock			285	550	610	110	1,290	3,009					5,854
Totals		1,100	5,613	5,725	4,170	810	5,139	4,438					26,995

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

COLLINGWOOD—Cleaning up channel and running shoal spots in it and harbour. A start was made to dredge a basin at northerly side of G. T. Ry. Co's. elevator wharf, where mooring facilities could be provided for vessels drawing not more than 11 feet. The latter is not very far advanced.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'MONARCH.' OWNER, CANADIAN DREDGE & CONSTRUCTION CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Midland	May 25 June 3 July 1 Sept. 23	May 29 June 29 July 24 Oct. 5	22 -25 feet	124,800	32,543 84	$26\frac{2}{5}$

Total expenditure, $32,543.84. Total cubic yards removed, 124,800.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		32 47	36 25	27 12							95 84
Contingencies		2,800 80	15,366 00	8,970 00		2,184 00	3,120 00				32,448 00
Totals		2,840 47	15,402 25	8,997 12		2,184 00	3,120 00				32,543 84

QUANTITES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Boulders, gravel and Clay		10,800	59,100	34,500		8,400	12,000						124,800

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MIDLAND.—Removal of dangerous shoal in harbour near the large elevator of G. T. Ry. Co., also alongside the G. T. Ry. Co. wharf in slip east of old elevator.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'MONARCH.' OWNER, OWEN SOUND DREDGE & CONSTRUCTION CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Tiffin	May 30 / July 25 / Oct. 7 / Nov. 28	June 1 / Sept. 21 / Oct. 22 / Dec. 14	18-25 feet	177,410	53,953 32	30⅔
Victoria Harbour	Oct. 23	Nov. 21	15-22 feet	75,600	6,093 00	08½

Total expenditure, $60,046.32. Total cubic yards removed, 253,010.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages					81 18	75 20	57 68	69 20	36 16		319 42
Contingencies		1,215 00	648 00	4,617 00	18,225 00	12,660 30	9,096 00	6,814 00	6,451 60		59,726 90
Totals		1,215 00	648 00	4,617 00	18,306 18	12,735 50	9,153 68	6,883 20	6,487 76		60,046 32

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		4,500	2,100	17,100	67,500	46,890	49,100	57,900	5,080				250,470
Rock									2,540				2,540
Totals		4,500	2,400	17,100	67,500	46,890	49,100	57,900	7,620				253,010

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

TIFFIN.—Construction of a channel to and a slip alongside of Grand Trunk Pacific elevators at Tiffin.

VICTORIA HARBOUR.—Construction of a channel about 1,300 feet long by about 170 feet wide and 15 feet deep leading to lumber wharfs. A beginning was also made towards the construction of channel to the proposed C. P. Ry. Co.'s wharfs and elevators.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'MEADE.' OWNER, C. S. BOONE.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
River Thames	April 18	May 21	13 feet	28,968	3,901 75	$13\frac{23}{50}$
Thessalon	July 6	July 11	12 "	$651\frac{1}{4}$	1,517 50	2 33
	Aug. 21	Aug. 23				
Blind River	July 13	Aug. 20	15 "	83,972	15,535 82	$18\frac{7}{10}$
Thessalon	Aug. 24	Oct. 24				
			Drilling only		3,946 50	

Total expenditure, $21,901.57. Total cubic feet removed, $112,691\frac{1}{4}$.

DETAILS OF EXPEFDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	35 00	47 50		40 00	42 50	40 00	162 50				367 50
Repairs	22 38										22 38
Contingencies	1,199 14	2,597 73		3,613 42	3,657 08	3,918 30	5,579 52				20,565 19
Totals	1,256 52	2,645 23		3,653 42	3,699 58	3,958 30	5,742 02				20,955 07

QUANTITIES AND DESCRIPTION OF MATERIALS DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay	9,178	19,790		19,532	19,768	21,180	22,592						112,040
Rock				420	$231\frac{1}{4}$								$651\frac{1}{4}$
Totals	9,178	19,790		19,952	$19,999\frac{1}{4}$	21,180	22,592						$112,691\frac{1}{4}$

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

THESSALON.—Removal of a rocky shoal near westerly end of landing pier.
BLIND RIVER.—Construction of a channel to Government wharf and turning basin at outer end of same.
RIVER THAMES.—Partial completion of channel through bar at entrance to river. The channel is 7,000 feet long and 100 feet wide.

ANNUAL REPORT from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 14.' OWNER, C. S. BOONE.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
Little Current	May 28	Nov. 16	22 feet.	91,188	158,686 19	1.74

Total expenditure, $158,686.19. Total cubic yards removed, 91,188.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	78 00	81 00	75 00	81 00	81 00	75 00	81 00	78 00	.....	.....	630 00
Contingencies	.....	9,036 73	27,117 97	23,114 51	26,214 07	23,760 54	30,217 17	18,595 20	.....	.....	158,056 19
Totals	78 00	9,117 73	27,192 97	23,195 51	26,295 07	23,835 54	30,298 17	18,673 20	.....	.....	158,686 19

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Rock	.....	5,215	15,645	13,335½	15,123½	13,708	17,433	10,728	.....	.....	.....	.....	91,188

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

LITTLE CURRENT.—Construction of a channel 300 feet wide and 1,800 feet long and 22 feet deep. This channel is approaching completion.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 6.' OWNER, GREAT LAKES DREDGING CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Mission and Kaministiquia Rivers	May 15	Dec. 3	22 feet.	601,108	55,086 63	$09\frac{4}{25}$

Total expenditure, $55,086.63. Total cubic yards removed, 601,108.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		48 00	100 00	108 00	108 00	100 00	108 00	104 00	12 00		688 00
Contingencies		2,735 82	7,826 40	9,348 57	9,898 65	8,201 70	8,687 90	7,506 81	192 78		54,398 63
Totals		2,783 82	7,926 40	9,456 57	10,006 65	8,301 70	8,795 90	7,610 81	204 78		55,086 63

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yd s.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		30,398	86,960	103,873	109,985	91,130	93,211	83,409	2,142				601,108

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MISSION AND KAMINISTIQUIA RIVERS.—Work done consisted in widening and deepening the new entrance channel from Thunder Bay to Mission River and Grand Trunk Pacific Terminal location.

ANNUAL Report from April 1, 1907, to March 31, 1908 *Continued.*

DREDGE 'No. 7.' OWNER, GREAT LAKES DREDGING CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Mission and Kaministiquia Rivers	July 25	Aug. 21	22 feet.	15,840	1,425 60	09

Total expenditure, $1,425.60. Total cubic yards removed, 15,840.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Contingencies					1,425 60						1,425 60
Totals					1,425 60						1,425 60

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay					15,840								15,840

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MISSION AND KAMINISTIQUIA RIVERS.—Dredging performed consisted in widening entrance channel from Thunder Bay to Mission River and Grand Trunk Pacific Terminal location.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 1.' OWNER, GREAT LAKES DREDGING CO.

Localties where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Fort William	July 4	Aug. 3	22 feet.	11,742	5,323 40	$45\frac{5}{25}$

Total expenditure, $5,323.40 Total cubic yards removed, 11,742.

DETAILS OF EXPENEITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March	Totals.
				$ cts.	$ cts.						$ cts.
Wages				54 00	12 00						66 00
Contingencies				4,902 16	355 24						5,257 40
Totals				4,956 16	367 24						5,323 40

QUANTITY AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
				Cub. yds.	Cub. yds.								Cub. yds.
Clay and stones				8,168	1,527								9,695
Rock				1,961	86								2,047
Totals				10,129	1,613								11,742

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

FORT WILLIAM.—Work done consisted in removing rocky shoal between Murphy's coal dock and Mission turning basin in the Kaministiquia River.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 9.' OWNER, CANADIAN DREDGING AND CONSTRUCTION CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yards.
					$ cts.	Cts.
Midland Harbour	May 27	July 18	18 feet.	20,850	5,553 27	$26\frac{61}{100}$

Total expenditure, $5,553.27. Total cubic yards removed, 20,850.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December.	January, February and March	Totals.
		$ cts.	$ cts.	$ cts.							$ cts.
Wages		32 48	36 25	63 54							132 27
Contingencies		338 00	2,977 00	2,106 00							5,421 00
Totals		370 00	3,013 25	2,169 54							5,553 27

QUANTITY AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
		Cub. yds.	Cub. yds.	Cub. yds.									Cub. yds.
Clay		1,300	11,450	8,100									20,850

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MIDLAND HARBOUR.—Removal of dangerous shoal in harbour near the large elevator of G.T.R. Co.; also alongside the G.T.R. Co. wharf in slip east of old elevator.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 1.' OWNER, C. S. BOONE.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure. $ cts.	Cost per Cubic Yard. Cts.
Wingfield Basin	July 25	Oct. 28	14-18 feet.	23,320		

Total expenditure, $..... Total cubic yards removed, 23,320.

DETAILS OF EXPENDITURE.

NONE.

QUANTITY AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December.	January.	February.	March.	Totals.
Hardpan, gravel, clay and boulders				Cub. yds. 1,376	Cub. yds. 4,236	Cub. yds. 4,788	Cub. yds. 7,102						Cub. yds. 17,502
Rock				850	2,972	1,996							5,818
Totals				2,226	7,208	6,784	7,102						23,320

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

WINGFIELD BASIN.—Construction of a channel from lake to harbour, which when completed is to be 100 feet wide in bottom and about 600 feet long and 11 to 18 feet deep.

ANNUAL Report from April 1, 1907, to March 31, 1908.—*Continued.*

DREDGE, 'No. 8.' OWNER, GREAT LAKES DREDGING CO.

Localities where Dredging wss performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Mission and Kaministiquia Rivers	May 20	Nov. 29	22 feet.	386,141	46,062 31	11 23/25

Total expenditure, $46,062.31. Total cubic yards removed, 386,141.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		44 00	100 00	108 00	108 00	100 00	108 00	104 00			672 00
Contract last season					2,812 86						2,812 86
Contingencies		2,324 56	6,283 03	6,741 87	6,787 29	5,645 64	8,324 98	6,467 08			42,577 45
Totals		2,368 56	6,383 03	6,852 87	9,708 15	5,745 64	8,432 98	6,571 08			46,062 31

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January.	February.	March.	Totals.
	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.
Clay		25,384	63,219	69,684	73,801	43,428	63,127	47,498					386,141

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MISSION AND KAMINISTIQUIA RIVERS.—Work performed consisted in completing the dredging in the entrance channels to grade, namely 22 feet below zero. During latter portion of season dredging consisted in deepening and widening river channel in Kaministiquia River to West Fort William.

ANNUAL Report from April 1, 1907, to March 31, 1908.—*Continued.*

DREDGE 'No. 5.' OWNER, GREAT LAKES DREDGING CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Mission and Kaministiquia Rivers	May 16	Dec 4	22 feet.	642,685	80,572 33	$12\frac{13}{25}$

Total expenditure, $80,572.33. Total cubic yards removed, 642,685.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		48 00	92 00	54 00	98 00	100 00	108 00	104 00	12 00		616 00
Contract last season					2,812 86						2,812 86
Contingencies		4,383 14	12,411 48	12,587 52	12,395 26	10,160 16	14,357 40	10,320 66	527 85		77,143 47
Totals		4,431 14	12,503 48	12,641 52	15,306 12	10,260 16	14,465 40	10,424 66	539 85		80,572 33

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January.	February.	March.	Totals.
	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.
Clay		34,749	103,429	104,896	102,869	84,668	119,645	86,564	5,865				642,685

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

MISSION AND KAMINISTIQUIA RIVERS.—Work consisted in deepening Mission turning basin to 22 feet below zero, in widening Kaministiquia River over property expropriated by Crown on Lot 10, Island No 2.

Several small shoal sections on Kaministiquia River were also removed.

ANNUAL Report from April 1, 1907, to March 31, 1908.—*Continued.*

DREDGE 'No. 9.' OWNER, OWEN SOUND DG. AND CONST CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Tiffin	July 19	Aug. 10	18 feet.	10,500	2,866 50	$27\frac{3}{10}$
Victoria Harbour	Aug. 14	Dec. 2	15 "	48,500	4,170 95	$8\frac{3}{5}$

Total expenditure, $7,037.45. Total cubic yards removed, 59,000.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages					82 64	87 32	40 08	78 37	9 04		297 45
Stores and equipment								25 00			25 00
Contingencies				1,809 90	1,826 00	1,152 00		1,840 00	88 00		6,715 00
Totals				1,809 90	1,908 64	1,239 32	40 08	1,943 37	97 04		7,037 45

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January.	February.	March.	Totals.
	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.	Cub. Yds.
Clay				6,700	13,800	14,400		23,000	1,100				59,000

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

TIFFIN.—Construction of a channel to and a slip alongside of G.T. Pac. elevators at Tiffin.

VICTORIA HARBOUR.—Construction of a channel about 1,300 feet long by 170 feet wide and 15 feet deep, leading to lumber wharfs.

ANNUAL Report from April 1, 1907, to March 31, 1908.—*Continued.*

DREDGE 'No. 1.' OWNER, A. F. BOWMAN.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	$ cts.
Sault Ste. Marie	Sept. 3	Dec. 17	21 feet.	24,841	50,519 80	2·03$\frac{4}{25}$

Total expenditure, $50,519.80. Total cubic yards removed, 24,841.

DETAILS OF EXPENDITURE

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March	Totals.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			48 55		18 10	75 16	83 19	78 16	45 16		348 32
Stores and equipment			3 10								3 10
Contingencies			12 60			7,813 84	13,263 66	16,583 52	12,494 76		50,168 38
Totals			64 25		18 10	7,889 00	13,346 85	16,661 68	12,539 92		50,519 80

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Boulders						1,898	558	313					2,769
Clay and stones						5,087	1,503	2,501	53				9,144
Rock						635	3,673	4,663	3,957				12,928
Totals						7,620	5,734	7,477	4,010				24,841

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

SAULT STE. MARIE.—Dredging in approach to Government wharf from the Channel to Canadian Lock; said channel is some 1,450 feet westerly of westerly end of said wharf. This is being done to enable all steamers to approach the Government wharf direct from the Canal channel, thus saving a long detour around the shoals.

ANNUAL Report from April 1, 1907, to March 31, 1908.—*Continued.*

DREDGE, "No. 4" (HACKETT.) OWNER, A. F. BOWMAN.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Waubaushene	June 22	Nov. 26	14 feet.	124,980	16,552 21	13 4/25

Total expenditure, $16,552.21. Total cubic yards removed, 124,980.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			76 86	81 26	81 70	64 99					304 81
Contingencies			2,152 80	3,065 40	3,825 90	3,073 20	2,687 10	1,443 00			16,247 40
Totals			2,229 66	3,146 66	3,907 60	3,138 19	2,687 10	1,443 00			16,552 21

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay			16,560	23,580	29,430	23,640	20,670	11,100					124,980

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

WAUBAUSHENE.—Dredging a channel from Waubaushene to Fesserton and partial construction of a turning basin 300 x 300 ft. at Fesserton, channel 100 ft. wide.

ANNUAL Report from April 1, 1907, to March 31, 1908.—*Continued.*

DREDGE, 'ONTARIO.' OWNER, CHATHAM DREDGING CO.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Sydenham River	July 1	August 7	8 feet.	7,223	1,547 10	21⅞
Jeannette's Creek	August 19	August 22	13 "	1,214	262 80	21 16/25

Total expenditure, $1,809.90. Total cubic yards removed, 8,437.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				72 00	44 00						116 00
Contingencies				1,182 30	511 60						1,693 90
Totals				1,254 30	555 60						1,809 90

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Total.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				5,879	2,558								8,437

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

SYDENHAM RIVER (Chenal Escarté Route.)—Channel at entrance to Chenal Escarté River.
JEANNETTE'S CREEK.—In front of and approaches to dock.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'ST. LAWRENCE.' OWNER, THE MANLEY CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Point Edward	May 29	Dec. 14	22 feet.	298,475	39,370 32	13.9/10

Total expenditure, $39,370 32. Total cubic yards removed, 298,475.

DETAILS OF EXPENDITURE.

——	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		9 00	75 00	108 00	108 00	75 90	78 06	78 00	36 67		568 57
Contingencies			4,306 38	7,411 04	7,473 18	5,267 73	5,965 96	5,558 54	2,818 92		38,801 75
Totals		9 00	4,381 38	7,519 04	7,581 18	5,343 63	6,043 96	5,636 54	2,855 59		39,370 32

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand		2,044	31,082	57,008	57,486	40,521	45,892	42,758	21,684				298,475

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

POINT EDWARD—Part excavation of whole area fronting docks and lying between docks and deep water.

ANNUAL Report from April 1, 1907 to March 31, 1908—*Continued.*

DREDGE 'SIMCOE.' OWNERS, BROWN & AYLMER.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Beaverton	May 23 / Oct. 24	July 6 / Nov. 1	9 feet.	18,094	6,642 75	$36\frac{7}{10}$
Thorah Island	July 10	July 11	9 feet.	804	134 00	$16\frac{23}{50}$

Total expenditure, $6,776 75. Total cubic yards removed, 18,898.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	.....	24 00	75 00	18 00	.....	39 00	81 00	78 00	.....	.....	315 00
Contingencies	.....	391 25	2,282 25	1,848 25	500 00	440 00	810 00	190 00	.....	.....	6,461 75
Totals	.....	415 25	2,357 25	1,866 25	500 00	479 00	891 00	268 00	.....	.....	6,776 75

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand	.....	1,565	9,129	4,204	.....	.....	3,240	760	.....	.....	.....	.....	18,898

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BEAVERTON—Dredging a channel 9 feet deep by 60 feet wide from lake to a turning basin, some overcasting was done to be used in filling at back of building piers.
THORAH ISLAND—Constructing a small basin and channel thereto from the lake for the protection and to afford better landing facilities for islanders, etc.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'TOGO.' OWNER, R. WEDDELL & CO.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Thornbury	May 27	Aug. 13	16-18 feet.	42,092	14,496 28	34 1/2
Meaford	Aug. 15	Oct. 31	20-22 "	43,320	14,931 10	24 25/27

Total expenditure, $29,427.38. Total cubic yards removed 85,412.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		22 50	62 50	67 50	77 50	75 00	82 30				387 30
Contingencies		818 38	5,232 91	5,751 10	6,126 46	5,426 40	5,684 80				29,040 08
Totals		840 88	5,295 41	5,818 60	6,203 96	5,501 40	5,767 10				29,427 38

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand		2,407	15,391	16,915	18,019	15,960	16,720						85,412

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

THORNBURY—Deepening the channel to inner harbour and deepening the latter alongside wharfs, a turning basin has now been constructed.
MEAFORD—Dredging in approaches to harbour from near outer breakwater to inner harbour and deepening the latter where necessary.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'TRENTON.' OWNER, ST. LAWRENCE AND GREAT LAKES DREDGING CO.

Localities where Dredging was performed.	Date.		Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
	From	To				
					$ cts.	Cts.
Dark Channel	July 5	Nov. 9.	14 feet.	118,655	30,861 36	·26

Total expenditure, $30,861.36. Total cubic yards removed, 118,655.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages				57 96	76 43	62 68	67 68	26 29			291 04
Contingencies				3,577 70	5,285 22	10,051 90	9,851 40	1,804 10			30,570 32
Totals				3,635 66	5,361 65	10,114 58	9,919 08	1,830 39			30,861 36

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay				25,555	29,803	5,185	5,240	4,315					70,098
Rock					2,782	23,315	19,460	3,000					48,557
Totals				25,555	32,585	28,500	24,700	7,315					118,655

NATURE OF DREDGING PERFORMED AT DIFFERENT LOCALITIES.

DARK CHANNEL—Dredging a straight channel 100 feet in width and 14 feet deep from Murray Canal to Trenton Harbour. This work is not fully completed.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'WARROD.' OWNER, LYONS & WHITE.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Rainy River	Oct. 2	Oct. 19	10 feet.	21,366	8,102 40	$37\frac{23}{50}$

Total expenditure, $8,102.40. Total cubic yards removed, 21,366.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September.	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages							60 00				60 00
Contingencies							8,042 40				8,042 40
Totals							8,102 40				8,102 40

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand							21,366						21,366

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RAINY RIVER—Dredging at this place represents work done in improving the steamer channel between Rainy River and Lake of the Woods. Work was also done at the end of Oak Point, a sandy ridge which is increasing northerly, blocking the steamer channel.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'CHALLENGE.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Dorval	July 8	Nov. 2	8–10 feet.	38,900	8,188 56	18 9/16
Ottawa	Nov. 4	Nov. 30	10 feet.	4,425		

Total expenditure, $8,188.56. Total cubic yards removed, 43,325.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts	$ cts.	$ cts.
Wages	75 00	.....	.....	456 41	636 77	458 00	447 19	443 00	54 19	2,786 39	5,356 95
Fuel	256 55	.....	7 25	11 00	152 27	302 63	137 02	168 46	.....	.....	1,035 18
Provisions	19 30	.....	.....	143 85	140 93	135 00	144 60	150 45	13 55	.....	747 68
Stores and equipment	138 80	31 60	111 35	138 80	25 27	3 50	4 03	4 50	.....	.....	457 85
Repairs	.....	91 60	186 79	66 12	.....	.....	.....	9 45	.....	162 30	516 26
Contingencies	.....	.....	19 10	5 25	5 70	9 37	5 62	29 60	.....	.....	74 64
Totals	489 65	123 20	324 49	821 43	960 94	908 50	738 46	805 46	67 74	2,948 69	8,188 56

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay	.....	.....	.....	5,000	13,300	11,850	8,650	4,525	.....	.....	.....	.....	43,325

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

DORVAL—Work consisted in making a channel in front of the Boat Club's wharf. OTTAWA—Dredging approach to Government wharf at foot of Rideau Canal Locks.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'MATTAWA.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Sturgeon Falls	May 20	Aug. 17	9-12 feet.	39,700	11,275 81	$21\frac{12}{25}$
North Bay	Aug. 19	Sept. 21	12 "	12,100		

Total expenditure, $11,275.81. Total cubic yards removed, 51,800.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	408 25	492 50	436 83	361 29	414 36	364 00	379 00	377 50	254 03	626 89	1,114 65
Fuel	193 39	328 92	253 30	314 33	200 00	424 90	18 50	28 75	.....	4 50	1,766 59
Provisions	56 00	.....	125 10	132 80	123 00	138 30	104 40	99 00	65 47	72 00	916 07
Stores and equipment	13 59	68 06	7 00	.....	88 22	99 40	8 50	4 01	5 60	172 85	467 23
Repairs	1,009 82	207 54	21 97	13 15	293 18	44 71	387 01	28 24	6 93	747 16	2,759 71
Pilotage and towage	.....	.....	.....	.....	.....	125 00	.....	.....	.....	.....	125 00
Contingencies	11 72	28 95	87 00	23 21	8 70	8 00	65 50	10 25	17 40	865 83	1,126 56
Totals	1,692 77	1,125 97	931 20	844 78	1,127 46	1,204 31	962 91	547 75	349 43	2,489 23	11,275 81

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay	.....	7,100	12,900	13,000	11,800	7,000	.....	.....	.....	.....	.....	.....	51,800

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

STURGEON FALLS.—One cut was made 573 feet long, 30 feet wide. This work consisted in the continuation of the cuts made the previous season.

NORTH BAY.—Work consisted in making nine cuts alongside the wharf and one cut at the mouth of the South River, running in front of the lighthouse.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'No. 2.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Rivière du Lièvre	July 29	Oct. 5	9 12 feet.	8,954	4,404 70	49$\frac{9}{10}$

Total expenditure, $4,404.70. Total cubic yards removed, 8,954.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	140 00	140 00	140 00	245 33	270 00	270 00	280 50	175 00	47 83	173 10	1,881 76
Fuel	330 00	.....	.....	.....	.....	.....	.....	32 00	.....	307 50	669 50
Provisions	21 42	48 00	46 14	66 59	89 20	111 69	87 00	55 00	.....	.....	528 04
Stores and equipment	5 00	.....	.....	.....	13 50	.....	.....	25 12	.....	.....	43 62
Repairs	.....	57 66	.....	23 00	.....	95 74	.....	76 30	6 10	373 48	632 28
Pilotage and towage	.....	.....	.....	.....	50 00	.....	.....	.....	150 00	.....	200 00
Contingencies	4 55	.....	.....	10 00	.....	.....	.....	4 95	430 00	.....	449 50
Totals	500 97	245 66	186 14	344 92	422 70	480 43	367 50	368 37	633 93	854 08	4,404 70

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds	Cub. yds.	Cub. yds.
Clay	.....	.....	.....	647	4,271	2,980	1,056	.....	.....	.....	.....	.....	8,954

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

RIVIÈRE DU LIÈVRE.—A turning basin was made one quarter mile below the locks. One cut was also made through the landslide. Work was also done removing débris from the cofferdam backing.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'NIPISSING.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Rideau Canal	May 20.	June 30.	10 feet.	12,915	10,223 12	13$\frac{24}{50}$
Papineauville	July 8.	July 31.	10 "	12,285		
Rockliffe	Aug. 5	Aug. 24	10 "	8,550		
South Nation River	Aug. 26	Aug. 31.	10 "	2,745		
Hawkesbury	Sept. 9	Nov. 16.	10 "	39,005		
Ottawa	Nov. 18.	Nov. 23.	10 "	580		

Total expenditure, $10,223.12. Total cubic yards removed, 76,080.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages		201 27	338 00	450 00	411 30	461 67	468 14	420 00	55 31	3,026 36	5,832 05
Fuel	256 55			290 08	212 14	472 94	445 38	92 57			1,769 66
Provisions	9 00	53 30	115 75	158 40	113 90	142 30	125 25	138 75	50 00		906 65
Stores and equipment	127 62	18 16	146 01	59 93	4 60		2 40	1 35	9 15		399 22
Repairs	133 69	114 36	652 21		154 51	34 30				132 97	1,222 04
Contingencies				42 50	38 75	2 45				9 80	93 50
Totals	526 86	417 09	1,251 97	1,000 91	935 20	1,113 66	1,041 17	652 67	114 46	3,169 13	10,223 12

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub, yds.
Sand and sawdust..	... .	3,465	9,450	12,285	11,295	11,160	20,565	7,860	.....	.....	.....	.....	76,080

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

Rideau Canal.—Work was started at Hog's Back, where a cut was made on Government land, 756 feet long, 25 feet wide. Material taken out was used for filling behind the dam and bridge, to stop leakage and also to strengthen the work. A cut was also made at Long Island to get material to fill in behind stop logs at bywash to prevent leakage.

Papineauville.—Dredging was done in front of sawmill and a cut made through a shoal to straighten and deepen old channel.

Rockliffe.—Work consisted in cleaning trees and other material which had fallen into main channel through a landslide.

South Nation River.—One cut was made, 563 feet long, 30 feet wide, to deepen and widen channel leading into the Ottawa River.

Hawkesbury.—Two cuts were made to widen and deepen the main channel.

Ottawa.—Dredging approach to Government wharf at foot of Rideau Canal locks.

ANNUAL Report from April 1, 1907, to March 31, 1908 —*Continued.*

DREDGE 'INTERNATIONAL.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Quebec	May 20	Nov. 16	30 46 feet.	88,500	21,456 24	24$\frac{6}{25}$

Total expenditure, $21,456.24. Total cubic yards removed, 88,500.

DETAILS OF EXPENDITURE.

	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	559 50	630 00	611 30	642 15	630 00	630 00	630 00	630 00	375 28	670 48	6,009 01
Fuel			680 13	139 50	487 21	147 35	274 42	165 07		52 40	1,946 08
Provisions	160 15	176 11	166 40	225 09	171 01	172 00	172 00	172 00	99 92	156 00	1,674 78
Stores and equipment	250 46			223 21		8 23	173 50	196 00	3 00	201 90	1,056 30
Repairs	313 98		742 52	50 19		601 35		127 53	254 48	0 60	2,070 65
Pilotage and towage						2,300 00			239 00		2,539 00
Contingencies					300 00				5,850 00	10 42	6,160 42
Totals	1,284 89	806 41	2,200 35	1,260 44	1,591 22	3,858 93	1,249 92	1,290 60	6,821 68	1,091 80	21,456 24

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Sand		4,000	9,000	12,000	14,500	19,250	25,750	4,000					88,500

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

QUEBEC.—The work consisted in continuing the work previously done, levelling the bottom for the deep water cribs for the extension of the new wharfs at the breakwater.

Annual Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'ONTARIO.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Amherstburg	May 20	June 8	18 feet	625	11,580 85	$30\frac{43}{50}$
Port Stanley	June 10	Aug. 31	23 "	18,990		
Port Burwell	Sept. 1	Nov. 23	20 "	17,910		

Total expenditure, $11,580.85. Total cubic yards removed, 37,525.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	668 00	467 53	521 58	602 21	505 19	499 45	492 26	443 06	56 33	765 84	5,021 44
Fuel	70 69	76 63	341 39	261 41	80 28	155 52	224 09	104 00	.....	8 75	1,322 76
Provisions	114 05	116 80	121 90	152 71	176 86	128 80	133 46	126 60	.....	.....	1,071 18
Stores and equipment	627 67	20 00	244 17	10 06	9 20	15 41	27 51	.....	5 42	72 50	1,032 06
Repairs	148 01	118 51	279 92	148 95	693 94	128 34	7 97	18 60	12 83	786 34	2,343 41
Contingencies	76 58	16 34	22 83	24 00	77 05	110 08	75 00	9 85	61 88	316 39	790 00
Totals	1,705 10	815 81	1,531 79	1,199 36	1,542 52	1,037 60	960 29	702 10	136 46	1,949 82	11,580 85

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay	.....	471	5,464	8,235	5,445	2,700	10,665	4,545	.....	.....	.....	.....	37,525

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

Amherstburg—Boulders were removed from the south end of the Pittsburg Coal Co.'s dock. Ridges were also levelled in front of Detroit, Windsor & Belle Isle Co.'s dock.

Port Stanley.—Work consisted in making berths for breakwater cribs. This work had to be gone over three or four times on account of the sea washing in sand.

Port Burwell.—The work was done outside and inside of east and west piers.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'PROGRESS.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Chicoutimi	May 20	Oct. 31	15 feet	101,800	33,560 90	29 17/50
Quebec	Nov. 4	Nov. 29	30 "	12,840		

Total expenditure, $33,560.90. Total cubic yards removed, 114,640.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February, and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	436 23	642 75	775 67	970 75	1,082 10	1,033 00	1,016 81	889 16	339 83	765 35	7,951 65
Fuel			3,003 11	68 90	4,510 24		1,725 70	250 27		90 06	9,648 28
Provisions	166 30	200 10	223 40	237 92	555 12	407 70	413 05	339 20	64 84	227 70	2,835 33
Stores and equipment	293 91	47 96	726 18	3 65	231 01	140 65	180 99	1,795 65	3 00	287 07	3,710 00
Repairs	416 00			214 87	377 01	9 90	119 19	392 67	81 22	995 64	2,606 50
Pilotage and towage	15 00								10 00		25 00
Contingencies		1,860 00	1,812 50	1,860 00	50 00	50 00	580 65		484 50	86 49	6,784 14
Totals	1,327 47	2,750 81	6,540 86	3,356 09	6,805 48	1,641 15	4,036 39	3,666 95	983 39	2,452 31	33,560 90

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay		4,600	18,400	22,000	17,900	18,300	20,600	12,840					114,640

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

CHICOUTIMI.—Work consisted in dredging the channel about five miles below Chicoutimi.

QUEBEC.—Deepening the channel opposite the St. John Railway wharf in the inner basin.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'QUEEN.' OWNER, DEPARTMEMT OF PUBLIC WORKS.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Ville Marie	June 4	Aug. 31.	7-9 feet.	22,140	10,640 06	$29\frac{9}{16}$
New Liskeard	Sept. 1	Oct. 31	9 "	13,428		

Total expenditure, $10,640.06. Total cubic yards removed, 35,568.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	565 75	467 00	455 00	455 00	479 20	455 00	454 03	435 00	277 09	1,100 05	5,143 12
Fuel	.....	.....	662 50	298 10	67 50	66 25	128 75	44 25	100 00	460 00	1,827 35
Provisions	157 00	135 00	135 00	135 00	135 00	135 00	135 00	123 00	52 30	281 33	1,423 63
Stores and equipment	40 26	67 97	98 95	141 00	.....	.....	61 55	25 57	.....	253 97	689 27
Repairs	40 25	23 67	150 50	128 06	88 63	.....	148 85	67 00	.....	456 07	1,103 03
Pilotage and towage	.....	.....	96 00	.....	.....	.....	.....	.....	.....	.....	96 00
Contingencies	80 00	.....	29 91	66 17	.....	.....	30 00	55 38	.....	96 20	357 66
Totals	883 26	693 64	1,627 86	1,223 33	770 33	656 25	958 18	750 20	429 39	2,647 62	10,640 06

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay	.....	.....	3,312	9,252	9,576	5,652	7,776	.....	.....	.....	.....	.....	35,568

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

VILLE MARIE.—Dredging was done in front and alongside the wharf to allow boats to land.

NEW LISKEARD.—One cut was made at the wharf and two other cuts near the mouth of the Wabi River to remove refuse coming down the river in the spring,

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE 'RICHELIEU.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was Performed.	Date. From	Date. To	Depth of Water made below Zero.	Cubic Yards removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
St. Denis	May 22.	June 8.	8 feet.	11,200	6,496 06	$20\frac{12}{25}$
	Sept. 4.	Oct. 12.				
	Oct. 22.	Nov. 2.				
St. Antoine	June 10.	Aug. 31	8 "	14,890		
St. Marc	Oct. 14.	Oct. 19.	8 "	1,850		
St. Charles	Nov. 4.	Nov. 15.	6 "	3,350		

Total expenditure, $6,496.06. Total cubic yards removed, 31,290.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	215 00	399 82	420 00	420 00	445 00	365 65	415 00	459 95	125 00	674 00	3,930 43
Fuel	10 85	122 37	108 45	4 00	.....	.....	.....	5 54	.....	1 50	252 67
Provisions	61 27	115 26	133 25	123 00	123 00	149 90	128 00	143 40	30 00	31 50	1,038 58
Stores and equipment	50 79	20 04	.....	6 23	13 39	7 83	3 80	.....	.....	66 68	168 76
Repairs	115 56	.....	33 58	82 06	77 40	329 87	44 19	137 72	.....	205 68	1,026 06
Contingencies	16 62	5 40	.....	.....	2 05	.....	15 77	10 55	.....	35 17	79 56
Totals	464 05	662 90	695 28	635 29	660 84	853 25	606 76	748 16	155 00	1,014 53	6,496 06

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay.....	.....	2,550	4,740	6,450	5,350	3,390	5,400	3,500	....	.....	....	.....	31,290

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

ST. DENIS.– Dredging at this place consisted in deepening alongside and in front of the wharf.
ST. ANTOINE.—An approach from the wharf to the main channel was made.
ST. MARC.—Dredging approaches to the wharf.
ST. CHARLES.—Dredging approaches to the wharf.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'SIR RICHARD.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Belleville	May 20	June 15	14 feet	5,900	9,264 65	12.5/6
Kingston	June 17	Nov. 9	14 "	59,600		
Prescott	Nov. 11	Nov. 16	16-18 "	9,500		

Total expenditure, $9,264.65. Total cubic yards removed, 75,000.

DETAILS OF EXPENDITURE.

---	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	518 00	510 50	468 50	494 28	430 00	448 75	430 00	430 00	201 58	880 75	4,812 36
Fuel	52 50	21 00	166 25	.....	187 01	329 80	317 40	355 60	.....	.....	1,729 56
Provisions	26 00	123 00	123 00	123 00	123 00	123 00	151 75	123 90	28 75	.....	945 40
Stores and equipment	.....	87 67	9 47	40 34	25 72	.....	4 98	1 95	2 80	17 15	190 08
Repairs	247 05	39 79	12 16	53 83	148 13	34 13	6 50	34 64	11 55	656 25	1,244 01
Pilotage and towage	.....	.....	.....	.....	.....	.....	.....	13 60	.....	.....	43 60
Contingencies	14 43	83 75	13 90	143 50	.....	.....	.....	18 90	7 80	17 33	299 61
Totals	857 98	865 71	793 28	854 95	1,213 86	935 68	910 64	1,008 59	252 48	1,571 48	9,264 65

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

——	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay	.....	600	10,800	6,200	13,300	15,000	15,400	13,700	.....	.....	.....	.....	75,000

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

BELLEVILLE.—Work was performed at the entrance to the harbour near the lighthouse.
KINGSTON.—Deepening alongside and in front of several wharfs, also making three cuts in the channel in the lower harbour.
PRESCOTT.—Dredging in front of wharf and approaches to ferry slip.

ANNUAL Report from April 1, 1907, to March 31, 1908—*Continued.*

DREDGE, 'ST. LOUIS.' OWNER, DEPARTMENT OF PUBLIC WORKS.

Localities where Dredging was performed.	Date. From	Date. To	Depth of Water made below zero.	Cubic Yards Removed.	Expenditure.	Cost per Cubic Yard.
					$ cts.	Cts.
Dorval	June 24	July 8	10 feet	1,290		
Montreal	July 18	July 20	15 "	300		
Charlemagne	July 25	Nov. 23	8-13 "	19,461	4,554 77	21 34/50

Total expenditure, $4,554.77. Total cubic yards removed, 21,051.

DETAILS OF EXPENDITURE.

—	April.	May.	June.	July.	August.	September	October.	November	December	January, February and March.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages			131 40	405 00	405 00	405 00	405 00	405 00			2,156 40
Fuel			185 54	241 50			225 60		8 44	31 57	692 65
Provisions			75 82	124 65	117 60	135 30	123 35	124 50			701 22
Stores and equipment	41 63					9 81	3 77	13 33		34 92	103 46
Repairs			6 85		18 81		22 50		23 25	735 23	806 64
Contingencies			1 95	2 07	0 35		1 10	27 85	10 00	51 08	90 40
Totals	41 63		401 56	773 22	541 76	550 11	781 32	570 68	41 69	852 80	4,554 77

QUANTITIES AND DESCRIPTION OF MATERIAL DREDGED.

—	April.	May.	June.	July.	August.	September	October.	November	December	January.	February.	March.	Totals.
	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.	Cub. yds.
Clay			600	2,490	4,393	4,478	6,300	2,790					21,051

NATURE OF DREDGING PERFORMED AT THE DIFFERENT LOCALITIES.

DORVAL.—Work consisted in making a channel in front of the boat club wharf.
MONTREAL.—A channel was started in front of the Grand Trunk Boating Club.
CHARLEMAGNE.—The main channel was widened and deepened at the head of Gaudry's Island.

PROVINCE OF MANITOBA.

LAKE MANITOBA.

During the past season, dredging at the following places on Lake Manitoba has been done: Gypsumville harbour, the 'Narrows' at mouth of White Mud river, and Manitoba Gypsum Company's dock at Totogan.

In the period from June 15 to September 14, during which dredging was done at Gypsumville, a total of 16,660 cubic yards of clay and small boulders were removed, in forming a channel leading into the Manitoba Gypsum Company's dock.

The navigable depth of this channel is nine feet at low water. A large turning basin has been made near the dock, and the width of the channel leading out to deep water in the lake is 65 feet. It is considered that this will complete the dredging at this locality.

In returning from Gypsumville, two days and a half were spent in dredging a channel into Einarsson's dock at the Narrows: 1,280 cubic yards of sand were removed in forming a channel, 160 feet long, 35 feet wide, and giving a navigable depth of eight feet of water.

From September 20 to October 15, 1,920 cubic yards of sand were removed from the bar formed at the mouth of the White Mud River.

From October 16 to 19, 820 cubic yards of sandy loam were removed from the front of the Manitoba Gypsum Company's dock at Totogan, on the White Mud river.

Dredge *Manitoba* and equipment went into winter quarters at the Landing, on the White Mud river, on October 22, and the season's work was practically ended on November 1.

The efficiency of dredge *Manitoba* has been greatly reduced owing to having only one small 30-yard dump scow. During last winter, a new 60-yard dump scow was constructed, and this will greatly increase the output of the dredge.

Total expenditure for fiscal year 1907-8, $5,414.25.

RED RIVER AND LAKE WINNIPEG.

During the season, dredge *Winnipeg* has been employed in maintaining the channel at the mouth of the Red river and in increasing depth of water at the cold storage plant in the Selkirk Slough. Dredge *Crane* has performed the following works: Dredging in front of new dock at Selkirk; maintaining channel at mouth of Red river; dredging channel through flats at Devil's lake, and dredging and removing boulders along Gimli wharf. There was considerable difficulty in keeping open the channel at mouth of Red river owing to its filling in from storms, but eventually a channel was opened about 600 feet long, 50 feet wide, with a navigable depth of nine feet at low water. Dredge *Crane* was put to work dredging the bar in the channel on June 12 and continued at that work until dredge *Winnipeg* resumed work on June 26. On July 4 tug *Star Hector* was sunk in the channel, and work with dredge *Winnipeg* was not resumed until August 13.

During the above interval dredge *Crane* was put to work at the mouth of the Red river, tug *Victoria* acting as tender, after being replaced by dredge *Crane*. On August 13 dredge *Winnipeg* resumed its work and continued uninterruptedly until October 9, when the fleet proceeded to Selkirk and removed some 3,720 cubic yards in forming a channel, 1,000 feet in length, 40 feet in width, with a depth of nine feet

at low water, for the accommodation of boats using the cold storage docks near the mouth of the Selkirk Slough. Dredge *Winnipeg* and equipment went into winter quarters finally on November 8.

In addition to part of dredging mentioned above, the following work has also been done by dredge *Crane* : Excavation in front of the new Selkirk wharf extension.

Two channels were dredged in Devil's lake, situated about 13 miles below Selkirk, on the east side, and distant about three miles from the Red river. A length of about 560 feet, with a width of 40 feet and depth of three feet at lowest water was dredged at the lower end of the lake; another cut of 240 lineal feet, with width of 40 feet and depth of three feet was made in the northeast portion of the lake. The material removed was cast over on each side.

From August 9 to October 2, dredge *Crane* was employed in dredging and removing boulders on the south side of Gimli wharf. A depth of six feet at lowest water, over a distance of 300 feet, and of an average width of 60 feet, was obtained.

On the north side of the wharf, the bottom was cleared of boulders over a distance of 250 feet.

Dredge *Crane* went into winter quarters on October 15.

The following is a summary of operations of dredges *Winnipeg* and *Crane* during the past season:—

Period.	Locality.	Dredge.	Excavation in cubic yds.
June 5 and 6	Cold storage dock, Selkirk Slough	Winnipeg	240
June 26 to July 6	Mouth of Red River	"	1,710
Aug. 13 to Oct. 9	" " "	"	11,370
Oct. 10 to Oct. 19	Selkirk Slough	"	3,720
May 14 to May 16	Selkirk Wharf	Crane	585
June 12 to June 22	Mouth of Red River	"	1,429
June 24 to July 13	Devil's Lake	"	3,295
July 15 to July 27	Mouth of Red River	"	883
Aug. 9 to Oct. 1	Gimli Wharf	"	1,974
Oct. 2 to Oct. 12	Selkirk Wharf	"	500
			25,706

The total cost of the above dredging was $14,101.88, a cost per cubic yard of 50.1 cents. This excessive cost per cubic yard is the result of repairs and delay.

WINNIPEGOSIS.

During the past season, the operations of dredge *Priestman* and equipment have consisted in the maintenance of the dredged channel across the bar formed in the lake, at the mouth of the Mossy river, and in the dredging of a channel into a safe harbour of refuge for the proposed fish hatchery, at Snake island.

The bar formed at the mouth of the Mossy river is an alluvial deposit carried down from the river. The dredging done at this locality is not of a permanent nature and has to be maintained yearly in order to allow boats, connected with a considerable fish and timber industry, to reach Winnipegosis, the principal port.

Owing to the lateness of the season, the work of dredging did not start until June 7.

From June 7 to September 2 and September 23 to October 4, dredge *Priestman* removed 13,550 cubic yards of fine sand and clay, at the mouth of the Mossy river. The total length of the dredged channel is 2,100 lineal feet, average width of cut, 100 feet, and navigable depth at low water, eight feet. Owing to the comparatively high stage of water on Lake Winnipegosis, no difficulty to navigation has resulted this season.

From September 3 to 23, a total quantity of 2,375 cubic yards of sand and gravel was removed in the dredging of a channel into a harbour of refuge at Snake island for the proposed new fish hatchery.

The length of dredged channel is 150 feet, navigable depth, five feet, and width 30 feet at bottom. Altogether, during the dredging season, extending from June 7 to October 4, a total quantity of 15,925 cubic yards of material have been removed at a cost of $4,498.19.

The delays during the season were mostly occasioned by:—

Wind and weather	14 days.
Repairs	20 "

the latter partly due to breaking of a fly wheel on hoisting engine which necessitated repairs in Winnipeg.

Dredge *Priestman* and equipment were laid up in winter quarters, at Winnipegosis, on October 4.

WINNIPEG RIVER.

Under the above heading is comprised the work of dredging in the Winnipeg river at Millar's rapids, one mile below Kenora, and the removal of a reef of rock at Thorat rapids, about 9 miles below Kenora.

At Millar's rapids, a channel was dredged 150 feet in length, 35 feet in width, with a navigable depth of seven feet at low water. At a point about 1,500 feet below Millar's rapids, the channel was cleared of boulders for a distance of about 400 feet, width 40 feet, and a depth of seven feet at low water was provided.

Dredging started on September 20, and was completed on October 18.

In connection with the improvement to the navigation of the Winnipeg river, there is also included the removal of a reef of rocks at Thorat rapids, about 9 miles below Kenora.

Thorat rapids is the eastern channel of the Winnipeg river, the western channel, known as the Dalles rapids, being the navigable channel. Owing to the small area of discharge in these two channels, the navigable channel at the Dalles is difficult to navigate in periods of high water or increased discharge.

Work was commenced at Thorat rapids on February 17, 1908, and at the end of the fiscal year about 2,500 cubic yards of a total quantity of 2,840 cubic yards had been blasted and partly removed.

It has been thought advisable to also remove about 700 cubic yards of rock at a point about three miles above Thorat rapids, known as the Narrows, and this work is now under progress.

When completed, the discharge area of the river at Thorat rapids will have been increased three times, and it is expected that this will prevent the gorging which now takes place at the Dallles rapids.

Total expenditure up to March 31, 1908, $7,708.21.

DREDGE VESSEL REPAIRS.

The following repairs to the dredging fleet were made during the season:—

Dredge 'Winnipeg.'—New locomotive type boiler, new hoisting drum, new turntable constructed, repairs to shipper shaft, pinions for bow anchors, crane reinforced with 6 by 6-inch angle iron, new 1½-inch hoisting chain, ⅞-inch backing chain. The repairs mentioned above have all been to the machinery.

Tug *'Sir Hector.'*—During the early part of the season, temporary repairs were made to the hull of tug *Sir Hector*, in the way of new planking above the water line. Truss rods were put through the hull to strengthen it, and some minor repairs to machinery made.

The department has entered into a contract with Mr. R. J. Morrill, of Collingwood, for the construction of a new tug hull, and this is now well under way, and will be completed by the opening of navigation. The workmanship on this hull has been of the very best.

Coal Scow.—In the early part of last season, the coal scow was caulked and painted.

Dump Scows.—Repairs to the deck and new timber heads were put in the dump scows early last season. This season it has been found necessary to go over these scows to put them in shape to last through the coming season. New sides and ends to the pockets were put in and scows caulked.

Dredge 'Crane.'—The repairs made to dredge *Crane,* during the early part of last season, consisted of putting in new bottom planking and caulking, new swinging gear, retubing boiler, new hoisting cables and new blade points for the orange peel bucket.

Tug 'Victoria.'—The engine and boiler of tug *Victoria* have been replaced by a fore and aft compound engine and marine boiler, supplied by the Doty Engine Works Company. The expenditure has been:—

Engine and boiler	$3,365 00
Installing and fittings	204 00
Total	$3,569 00

Dredge 'Manitoba.'—New dipper arms reinforced with angle irons, new spud anchors, dredge caulked and painted. This season, reinforcing angles have been placed on the boom.

Tug 'Carberry.'—Caulked above the water line and painted.

Dump Scow.—The dump scow used with dredge *Manitoba* has been repaired by planking over with 2-inch tamarac, and scow caulked.

New Dump Scow.—A new 60-yard dump scow has been constructed for dredge *Manitoba,* and is ready for use this season. The expenditure on this scow is $2,387.44.

Classification of Disbursements of the Dredges during the Year ended March, 31st 1908.

DREDGE 'WINNIPEG.'

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Wages	1,075 65	740 96	750 00	747 10	260 65	50 00	50 00	50 00	50 00			932 75	4,707 11
Coal	809 62	42 00	795 52			25 50							1,672 64
Wood		1 00						171 00					172 00
Provisions	227 67	218 50	186 33	201 03	52 63							291 61	1,177 77
Stores	38 85		50 26	38 55	50							52 60	180 76
Equipment	263 35						110 00					72 01	445 36
Repairs	535 32	217 44	48 95	415 91		46 66	49 49					213 69	1,527 46
Contingencies	1 43				54 40		21 50					61 80	139 13
Totals	2,951 89	1,219 90	1,831 06	1,402 59	368 18	122 16	230 99	221 00	50 00			1,624 46	10,022 23
Working expenses	2,416 57	1,002 46	1,782 11	986 68	368 18	75 50	181 50	221 00	50 00			1,410 77	8,494 77
Repairs, ordinary	535 32	217 44	48 95	415 91		46 66	49 49					213 69	1,527 46
Totals	2,951 89	1,219 90	1,831 06	1,402 59	368 18	122 16	230 99	221 00	50 00			1,624 46	10,022 23

DREDGE 'CRANE.'

Wages	238 00	435 34	481 75	410 48								259 55	1,825 12
Wood		15 00	16 50										31 50
Provisions	149 99	110 06	120 85	147 86								61 79	590 55
Stores	8 40	15 18		11 55	12 25							2 01	49 39
Equipment												3 90	3 90
Repairs	18 45	16 52	7 55	11 82								25 70	80 04
Towage	178 50												178 50
Contingencies	3 20		10 00	61 85									75 05
Totals	596 54	592 10	636 65	643 56	12 25							352 95	2,834 05
Working expenses	578 09	575 58	629 10	631 74	12 25							327 25	2,754 01
Repairs, ordinary	18 45	16 52	7 55	11 82								25 70	80 04
Totals	596 54	592 10	636 65	643 56	12 25							352 95	2,834 05

DREDGE 'MANITOBA.'

Wages	614 00	584 66	615 00	598 00	32 66							540 27	2,984 59
Wood	121 50	396 25	175 50	141 00		9 00		73 32	175 00				1,091 57
Provisions	10 64	256 44	25 65	493 08	133 49							195 50	814 80
Stores	5 35	34 00	4 80	31 01		6 25						56 42	137 80
Repairs	37 63	19 58	8 50	20 13								66 98	152 82
Contingencies	124 30					25 25						1 95	151 50
Totals	913 42	1,290 93	829 45	983 22	166 15	40 50		73 32	175 00			861 12	5,333 11
Working expenses	751 49	1,271 35	820 95	963 09	166 15	40 50		73 32	175 00			794 14	5,055 99
Repairs, ordinary	37 63	19 58	8 50	20 13								66 98	152 82
" extraordinary	124 30												124 30
Totals	913 42	1,290 93	829 45	983 22	166 15	40 50		73 32	175 00			861 12	5,333 11

DREDGE 'PRIESTMAN.'

	1907.	1907.	1907.	1907.	1907.	1907.	1908.	1908.	1908.	1907.	1907.	1907.	
Wages	464 67	454 50	472 33	206 90	80 00	80 00	80 00	80 00	80 00	122 75	186 00	448 51	2,755 66
Wood	14 00	4 50		2 00				438 50	35 00	65 00	108 00	16 80	683 80
Provisions	185 95	133 77	75 95	55 77	6 29						5 00	10 65	473 38
Stores	51 74	22 03	1 25	6 50							83 62	1 00	166 14
Equipment	47 37	9 45	9 09	6 00							4 20	12 00	88 11
Repairs	1 25	114 32	4 25				1 70	33 21			87 81	40 65	283 19
Contingencies	5 50	4 00	75	4.25					2 00	3 35	1 50	2 25	23 60
Totals	770 48	742 57	563 62	281 42	86 29	80 00	81 70	551 71	117 00	191 10	476 13	531 86	4,473 88
Working expenses	769 23	628 25	559 37	281 42	86 29	80 00	80 00	518 50	117 00	191 10	388 32	491 21	4,190 69
Repairs, ordinary	1 25	114 32	4 25				1 70	33 21					154 73
" extraordinary											87 81	40 65	128 46
Totals	770 48	742 57	563 62	281 42	86 29	80 00	81 70	551 71	117 00	191 10	476 13	531 86	4,473 88

PROVINCE OF BRITISH COLUMBIA.

This service represents the work and maintenance of the hydraulic dredge *King Edward* and snag boat *Samson*.

The dredge *King Edward* has been employed during the past fiscal year in deepening the channel at Steveston, at Ladner, at the head of Lulu island, immediately below New Westminster, in front of the Royal City saw-mills, the material being pumped on to the low-lying land at the lower end of the town, and in filling in around the wing dam that was built at Annieville bar.

On March 23, the dredge moved to Matsqui and commenced the work of filling in around the wing dams which were being built to protect the bank and dyke at that point. She was working there at the end of the fiscal year. The total amount of material dredged during the year was 595,180 cubic yards.

The snag boat *Samson* was employed during the year, in removing snags between the mouth of the Fraser river and Chilliwack, a distance of about 70 miles, and in keeping in position the buoys marking the channel at the mouth of the river as well as placing other buoys and aids to navigation in position as far up the river as the Fraser river mills, where ships are taken to load lumber. The boat and crew were also employed in taking soundings and making surveys to determine the position of the channel, &c.

The total expenditure under the head of 'Dredging, B.C.' was as follows:—

Dredge *King Edward*.	$36,153 02
Snag boat *Samson*.	16,190 12
	$52,343 14

VICTORIA HARBOUR.

The total amount of material excavated by the dredge *Mud Lark* for the year ending March 31, was 97,300 cubic yards of sand, gravel and clay. The work was done at the entrance to the harbour, also at the outer wharf, and the C.P.R. wharf in the inner harbour. A few days' work was also performed dredging out a berth for the Victoria Yacht Club.

The drilling plant was at work at Petrel rock, which was uncovered by the dredge *Mud Lark*, when deepening the fairway leading to the C.P.R. wharf. Some small points of rock were also blasted close to the inner slip of the C.P.R. wharf. Petrel rock was about 90 feet long by about 50 feet wide. The highest point had nine feet of water over it at low water. There was only one more platform to be drilled when work was closed down in February last. This work will be completed as soon as money is available to commence operations again.

The expenditure on *Mud Lark* was.	$19,543 49
The expenditure on rock work was.	10,374 84
	$29,918 33

KOOTENAY RIVER.

During the months of January and February last, a force of men was employed in removing boulders from the channel of the Kootenay river, from opposite Proctor, down stream for about two miles. The plant used consisted of a scow, hoisting engine and small tug-boat. The boulders were hoisted into the scow and towed out to deep

water where they were thrown overboard. Those which were too large to be hoisted out were first broken up with powder. In all, 639 boulders were removed, 286 of which required blasting.

The total expenditure was $2,425.02.

NEW DREDGING PLANT.

The expenditure on this service from this office was in connection with the snag boat for the Skeena river, which, at the end of the fiscal year, was nearly completed. The boiler was placed in the boat on March 20, and the work of finishing up and equipping was rushed so as to get the boat up to the Skenna as soon as fishing operations commenced. She arrived there on April 29, and was then ready to commence work, which she did on May 2, a few days' delay occurring in getting the crew, &c., on board.

The total expenditure was $3,379.17.

DREDGE REPAIRS.

The repairs, in the cases of the dredges *King Edward* and *Mud Lark,* were rather heavy last year. In the case of the former they included the renewal of the rubber couplings and some of the heavy pipe connection with pump, &c. The *Mud Lark's* expenses represent the entire renovation of the tender *Princess;* repairs to the hopper scows, which are getting very old, and some repairs to the dredge itself, such as putting in new spuds and repairs to dipper. The repairs to the snag boat *Samson* were small, and include painting, &c. Those to the tug *Petrel* include hauling out, cleaning and painting, &c.

The expenditure was as follows:—

Dredge *King Edward*	$ 6,161 55
Snag boat *Samson*	532 36
Dredge *Mud Lark*	13,926 77
Tug *Petrel*	723 08
	$21,343 76

DREDGING PLANT UNDER THE CONTROL OF THE DEPARTMENT OF PUBLIC WORKS, 1908.

MARITIME PROVINCES.

'St. Lawrence' self-propelling elevator dredge.

Length over all, 170·0 feet.
Beam, 30·0 feet.
Least working depth, 8·5 feet.
Greatest working depth, 28·0 feet.
Capacity of hopper, 350 cubic yards.
Daily dredging in hard material, 350 to 700 cubic yards.
" " ordinary earth, 750 to 1,000 cubic yards.
" " soft earth, 1,050 to 1,400 cubic yards.

'Canada' self-propelling elevator dredge.

Length over all, 130·0 feet.
Beam, 20·0 feet.
Least working depth, 7·0 feet.
Greatest working depth, 16·0 feet.
Capacity of hopper, 90 cubic yards.
Daily dredging in hard bottom, 180 to 270 cubic yards.
" " ordinary material, 180 to 360 cubic yards.
" " soft material, 360 to 450 cubic yards.

'Prince Edward' spoon dredge.

Length, 80 feet.
Width, 28 feet.
Greatest working depth, 21 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 500 cubic yards.
" " soft material, 700 cubic yards.
Number of accompanying dump scows or barges, 3.
Capacity of bucket or spoon, 1½ cubic yards.

'Geo. McKenzie' spoon or dipper dredge (wooden hull).

Length, 90 feet.
Width, 28 feet.
Greatest working depth, 22 feet.
Daily rate of dredging in hard material, 350 cubic yards.
" " ordinary material, 500 cubic yards.
" " soft material, 600 cubic yards.
Number of dump scows or barges used, 3.

'Cape Breton' boom and dipper dredge (steel hull).

Length, 91 feet.
Beam, 36 feet.
Greatest working depth, 34 feet.
Daily rate of dredging in hard material, 1,000 cubic yards.
" " ordinary bottom, 1,500 cubic yards.
" " soft bottom, 2,000 cubic yards.

The spoon 'New Dominion' (wooden hull).

Length over all, 90 feet.
Width, 28 feet.
Greatest working depth, 21 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 450 cubic yards.
" " soft material, 600 to 700 cubic yards.

The clam shell dredge 'New Brunswick' (wooden hull).

Length over all, 90 feet.
Width, 25 feet.
Greatest working depth, 17 feet.
Daily rate of dredging in hard material, 180 cubic yards.

Daily rate of dredging in ordinary material, 300 cubic yards.
" " soft material, 650 cubic yards.

The 'W. S. Fielding' combined elevator and hydraulic hopper dredge.

Length, 250 feet.
Beam, 42 feet.
Depth, 18 feet.
Working depth, 60 feet.
Capacity of hoppers, 1,000 cubic yards.
Daily output of buckets, 2,600 cubic yards.

The spoon dredge 'Montague' (steel hull).

Length over all, 90 feet.
Width, 37 feet 8 inches.
Draught, 5 feet 6 inches.
Greatest working depth, 28 feet.
Daily rate of dredging, 10 hours, 1,000 cubic yards.
Number of barges used (each 72 feet long 19 feet 8 inches wide, depth 7 feet), 2.

The sand pump dredge 'Northumberland' (steel hull).

Length, 130 feet.
Agitator, 65 feet.
Width, 52 feet.
Draught, 7 feet.
Working depth, 40 feet.
Daily working capacity, 4,000 cubic yards in ten hours.

Tug 'Helena.'

Length, 111 feet.
Beam, 23 feet.
Hold, 13 feet.
Horse-power, 25.

Tug 'Cricket.

Length, 36·5 feet.
Beam, 7·3 feet.
Draught, 3·10 feet.
Horse-power, 4.

Tug 'Rona.'

Length, 85·0 feet.
Beam, 19·3 feet.
Draught, 8·0 feet.
Horse-power, 25.

One pile driver, with boiler and engine mounted on scow.

One stone lifter with large grips (no boiler).

There are two (2) steel hopper barges of 200 cubic yards capacity under contract for the dredges in the maritime provinces.

QUEBEC AND ONTARIO.

'Queen' dipper dredge.

Length, 65·3 feet.
Beam, 25 feet.
Greatest working depth, 17·0 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 400 cubic yards.
" " soft material, 600 cubic yards.
(Dredge attended by tug *Sensation* and two dump scows of 30 cubic yards capacity.)

'Nipissing' dipper dredge.

Length, 70·7 feet.
Beam, 25·0 feet.
Greatest working depth, 20·0 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " soft material, 800 cubic yards.
" " ordinary material, 500 cubic yards.
Capacity of bucket, 3 cubic yards.
(Attended by tug *Delisle*, 2 dump scows and 1 coal tender.)

'Ontario' dipper dredge.

Length, 75·0 feet.
Beam, 25·0 feet.
Greatest working depth, 22·0 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 500 cubic yards.
" " soft material, 800 cubic yards.
(Attended by tug *Sir John* and 2 dump scows.)

'Challenge' dipper dredge.

Length, 70·5 feet.
Beam, 25·0 feet.
Greatest working depth, 21·10 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 500 cubic yards.
" " soft material, 800 cubic yards.
(Attended by tug *Trudeau* and 2 dump scows.)

'St. Louis' spoon dredge.

Length, 50·0 feet.
Beam, 14·0 feet.
Greatest working depth, 12·0 feet.
Daily rate of dredging in hard material, 50 cubic yards.
" " soft material, 300 cubic yards.
(Attended by tug *Daisy* and 2 dump scows.) Used only in light work.

'Twin stone lifter (catamaran).

Length of each wooden hull, 42·0 feet.
Beam of each wooden hull, 8·5 feet.
Distance between hulls, 7·0 feet.

'Reserve' wooden scow.

Length, 59·0 feet.
Beam, 17·0 feet.
Capacity, 100 tons.

'Sir Richard' dredge.

Length, 80·0 feet.
Beam, 28·0 feet.
Greatest working depth, 22·0 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 500 cubic yards.
" " soft material, 800 cubic yards.
Capacity of bucket, 3 cubic yards.
(Dredge attended by tug *St. Paul.*)

'Richelieu' dredge.

Length, 70·0 feet.
Beam, 22·0 feet.
Daily rate of dredging in ordinary material, 400 cubic yards.
(Attended by tug *Ottawa* and 2 dump scows.)

'Steam stone lifter' centre well.

Length, 25·0 feet.
Beam, 23·0 feet.
Depth, 4·0 feet.
(Attended by 130-foot scow as coal tender.)

'St. Maurice' dredge.

(A small dredge used on the River St. Maurice only.)
Tug *Annette* and stone lifter.

'Lake St. John dredge.'

(A small dredge used in Lake St. John only.)
Tug *Marie-Louise* on Lake St. John.

'International' dipper dredge.

Length, 109·6 feet.
Beam, 41·0 feet.
Greatest working depth, 60·0 feet.
Daily dredging in hard material, 1,000 cubic yards.
" " ordinary material, 1,000 cubic yards.
" " soft material, 2,000 cubic yards.

'Progress' dredge.

Length, 90·10 feet.
Beam, 39·2 feet.
Greatest working depth, 30·0 feet.
Daily rate of dredging in hard material, 500 cubic yards.
" " ordinary material, 1,000 cubic yards.
" " soft material, 1,500 cubic yards.
(Dredge attended by tug *Monitor* and 3 scows.

'Mattawa' dipper dredge.

Length, 75·0 feet.
Beam, 25·0 feet.
Greatest working depth, 25·0 feet.
Daily rate of dredging in ordinary material, 1,000 cubic yards.
(Dredge attended by tug *Catherine* and 2 dump scows.)

'Dredge No. 1' on River St. Louis Feeder.

Length, 55·0 feet.
Beam, 20·0 feet.
Greatest working depth, 12·0 feet.
Daily rate of dredging, 300 to 400 yards.

'Dredge No. 2' dipper dredge.

Length, 60·0 feet.
Beam, 22·0 feet.
Greatest working depth, 14·0 feet.
Daily rate of dredging, ordinary material, 400 cubic yards.

'Dredge No. 6' dipper dredge.

Length, 97 feet.
Beam, 36·4 feet.
Greatest working depth, 35 feet.
Daily rate of dredging, ordinary material, 1,500 cubic yards.

(Tugs *Speedy, Montmorency, Blanche.* Schooner *Rutherford.*)

MANITOBA.

'Winnipeg,' dipper dredge.

Length, 71·0 feet.
Beam, 25·0 feet.
Greatest working depth, 20·0 feet.
Daily rate of dredging in hard material, 300 cubic yards.
" " ordinary material, 500 cubic yards.
" " soft material, 800 cubic yards.

'Manitoba' dipper dredge.

Length, 60 feet.
Beam, 24 feet.
(Dredge attended by tug *Victoria* and two dump scows.)

'Priestman' barge and clam-shell dredge.

A small dredge, old and not much good.

'Crane' orange peel dredge.

A scow fitted up as a dredge.

BRITISH COLUMBIA.

'King Edward' propelling hydraulic dredge.

Length, 125 feet.
Beam, 32 feet.
Greatest working depth, 40 feet.

'Mud Lark' dipper dredge.

Length, 90 feet.
Beam, 30 feet.
Greatest working depth, 40 feet.
Daily rate of dredging in hard material, 300 to 400 cubic yards.
" " ordinary material, 500 to 600 cubic yards.
" " soft material, 800 cubic yards.
(Dredge attended by tug *Princess* and three dump scows.)

'Nakusp,' self-propelling dipper dredge.

Length, 80 feet.
Beam, 25 feet.
Boom, 50 feet.
Dipper capacity, $\frac{3}{4}$ foot.

Tug-boat 'Muskrat II.'

Length, 80 feet.
Beam, 20 feet.

'Samson' snag boat.

Length, 115 feet.
Beam, 30 feet.

'Petrel' and tender.

Length, 85 feet.
Beam, 17 feet.
Horse-power, 280.

DRY DOCKS.

The Dominion government owns and operates three dry docks, viz.: the Lorne dry dock at Lévis, province of Quebec; the Kingston dry dock at Kingston, in the province of Ontario, and the Esquimalt dry dock, at Esquimalt, near the city of Victoria, in British Columbia.

LÉVIS DRY DOCK.

During the last fiscal year this service was kept in an efficient manner. The total expenditure of $21,760.09 was incurred in connection with the usual repairs required for the proper maintenance of the property.

Total amount of revenue, $24,352.49.

KINGSTON DRY DOCK.

During the past fiscal year, the dock has been occupied 250 days by 54 vessels, representing a total tonnage of 29,105 tons. The amount of revenue collected was $9,095.89.

Besides the usual cleaning and painting of dock and other general repairs, the installation has been made of two new sets of boiler tubes; the blocks and the caisson shaft were also repaired.

Total expenditure, including staff wages, maintenance, repairs, &c., $7,335.99.

ESQUIMALT DRY DOCK.

The dock has been occupied 195 days during the past twelve months, and twenty ships, with an aggregate tonnage of 75,904 tons gross, have been docked for cleaning and repairs.

The staff was employed in docking and undocking the twenty ships above mentioned; in keeping the plant and premises in order, and in making what alterations and additions were found to be necessary.

The usual list of ships docked and revenue collected in 1907-8 will be found in report of Collector of Revenue, part 6.

Total revenue, $29,760.20.

Total expenditure, $13,405.82.

YAMASKA LOCK.

The River Yamaska flows through the county of the same name and empties into the St. Lawrence, on the southern shore, at the head of Lake St. Peter, eight miles below Sorel.

The construction of the lock and dam commenced in August, 1881, was completed at the end of August, 1885, at a cost of $87,465.43.

By the construction of these works and by dredging done subsequently in the channel below the lock, the river has been rendered navigable for vessels of moderate draught (5 feet 6 inches) up to Belle Pointe or St. Aimé, a distance of 20 miles.

During the last fiscal year the sum of $675.80 was expended in repairing the dam of the Petit Chenal and at the eastern pier of the lock.

SLIDES AND BOOMS.

The Dominion government owns and operates slides and boom works, built to facilitate the passage of square timber, round logs, flatted and dimension timber, &c., on the river Ottawa and tributaries, on the St. Maurice river, the Saguenay river, and at Fenelon Falls and Burleigh Falls, on the Trent river.

In the subjointed reports, the superintending engineers of the river works, Messrs. G. P. Brophy, F. X. Lefebvre and J. C. Taché, give particulars relative to the construction, improvements and repairs carried out under their supervision on government slides, booms, piers, dams, streams, buildings, &c., during the fiscal year, the expenditure incurred for staff, maintenance, improvements, &c., the quantities of the various descriptions of timber that pass through their works, and other information of general interest and utility to lumbermen and the public at large.

REPORT ON THE OTTAWA RIVER WORKS.

(By G. P. Brophy, Superintending Engineer.)

Ottawa, June 30, 1908.

The Chief Engineer,
Department of Public Works,
Ottawa.

Sir,—Pursuant to instructions received by me in your circular of the 2nd instant, I have the honour to submit report on the works under my charge, for the fiscal year ended March 31, 1908.

REPAIRS AT STATIONS ON OTTAWA RIVER—MAIN STREAM.

North Chaudiere station.—A break in the bottom of the upper slide was repaired. This occurred a short distance below the bulkhead and necessitated the laying of several cross sills covered with oak plank, three inches in thickness. Iron bars were set to protect the floor and in several other places, the old iron bars were removed, straightened and relaid. The booms leading to the entrance of the slide were repaired and strengthened by laying new planking and cross-fenders.

At the lower basin, a new sluiceway was made to regulate the water in the pond and to properly supply the slides. The side piers are each twelve feet in length, thirteen feet high and project five feet outside of cribwork, the rear portions being built into the old works. On the upper side are two wings, each sixteen feet long, the clear opening between the piers being twelve feet. The bulkhead is equipped with the necessary stop-logs and hoisting gear to manipulate them. On the east side of the sluiceway, a wing-dam extends thirty-seven feet to solid rock on the island. A support pier was constructed in rear of the pier dam to west of the slides. This is about eight feet average width, forty feet in length, battered at back, planked on top and of the same height as the dam. The floor of the waste gate was raised to within two and a half feet of the level of the water in the basin, forming a spill-wat or overflow. The head piers or slides were raised by placing a course of timber along the outer side, the portions in rear being filled with stone. The planking on the dams was repaired and fastenings were provided for the snubbing of the guide booms.

South Chaudiere station.—At this station, two sections of guide boom, at entrance to upper slides, which had broken away, were hauled back to position and properly secured. A number of loose planks in bottom of slides were spiked in place. The sides and ends of one of the storehouses, forty feet by twenty feet, were covered with rock-faced siding, which received two coats of paint. A brick chimney was built for this building and the roof was repaired. The boom chains were regulated to the rise and fall of the water in the slide and hydraulic channels, and the buildings were maintained in an efficient state of repair.

Chats Station.—The only expenditure at this station was for materials for repairs to some of the cant-dogs.

Cheneaux Station.—The outlay here was also of a minor character and was incurred in having some material sawn for a covering for one of the floating platforms.

Mountain Station.—The superstructure of the two bulkheads were jacked to place and new foundation sills were inserted under the posts, as the old timbers had become decayed and allowed the superstructure to settle. The tops of both bulkheads were covered with hemlock plank, three inches in thickness, and the steps leading to the tops were renewed. A quantity of timber and chains were procured for repairs to the guide-booms, and this work has since been carried out.

Calumet Station.—Portions of the abutment piers of bridge across first slide and leading to station house, were rebuilt. The tops were raised three feet; three pine stringers were placed in the bridge and the flooring was laid with two-inch hemlock plank. Four posts and two sills of pine were renewed at the entrance bulk-head; portion of the covering were replaced, and five stop logs of maple, 28 feet long, were provided.

An oak picket was made for the guide boom at entrance to third slide.

At the rolling dam, below third slide, the clear opening was widened some nine feet to facilitate the passage of cribs of timber.

TRIBUTARIES OF THE OTTAWA RIVER.

Gatineau River.—Some sections of the main boom had become much worn through the constant working of the connection chains. The ends of the sticks were sawn off, and other holes were bored further up in the solid timber, for the chains. Many new caps were put on the top of the booms, and timber fenders were set on the boom piers to protect the corners. Additional stone ballast was placed in the cribwork, along the southern shore, to prevent erosion of the bank. The fences at the Government reserve were extended and repaired and the buildings were kept in a proper state of repair. The sorting gaps were repaired and moved from place to place according to the elevation of the water in the river. During the spring months, ice was cut to free the booms and protect them from damage. A supply of suitable timber was purchased for use in making repairs in the future.

Coulonge River.—At High Falls station, two rounds of timber were placed on a boom pier opposite the main falls and three piers supporting the main boom. Two oak pickets with cap pieces were made for the guide boom at outlet of slide; the top of the bulkhead was covered with three-inch pine, and six new stop logs were made for the slide. A section of the floor of slide at entrance, one hundred and twelve feet in length, was taken up and relaid, and joints were made closer to hold the water better. At a point some three hundred and sixty feet below the bulkhead, and continuing downward for a distance of six hundred and sixty feet, a course of three-inch pine was laid in the bottom over the old planking, which had become worn and very thin.

Seventy-seven posts, forty-five braces, and forty-four cross-sills were renewed, while over 28,000 feet B.M. of birch and pine plank were laid in slides and bottom of slide.

Four hundred and fifty lineal feet of foot boards were renewed. At several places, the slide had become sagged owing to the settlement of the foundation cribwork. The superstructure was jacked up and the necessary blocking was inserted to keep it in position. Portions of the foundation cribwork, damaged by rocks falling from the steep side of the mountain, were repaired, and seven cubic yards of new stone filling were placed in the cribs.

Black River.—The sheeting of the slide at High Falls was renewed in many places. Twenty-one sills, twenty-eight posts and sixty-three braces were replaced in slide. At several places where the timbers were gouged out by the logs, maple planks were let in to fill the deficiency. Thirty-nine bars of iron, $\frac{1}{4}$-inch thick, were laid in the slide, and two eye bolts, $1\frac{1}{2}$ inches in diameter, were set in the solid rock to which were attached chains for the purpose of staying the superstructure. Five posts and three sills were put in the bulkhead, and the top was covered with pine plank, two inches in thickness. Five timbers and seven cap pieces were added to the guide-boom leading to the slide. With a view to making further repairs at this station, the necessary pine timber was procured and laid down on the reserve, and a sufficient supply of pine and maple plank was also secured for use during the running season.

Petawawa River.—At first chute station some of the flooring of the slide was removed.

At second chute station, the upper portion of side pier at foot of slide was rebuilt. This pier is thirty-four feet long, eight feet wide, the portion reconstructed being three feet in height. Seventeen posts and six cross sills were replaced and the sheeting in the sides and bottom was patched.

At third chute station, the sheeting on the glance piers was repaired, and extra fenders were supplied to protect the surfaces most exposed to wear. A round of timber and eighteen cubic yards of stone filling were added to the snubbing pier for guide boom.

At half mile station, a longitudinal stringer and three cross-ties were put into the flat dam, and the sheeting on face was also repaired.

At Ragged Chute station, a pier dam was built to block a shallow channel between an island and the south shore. This pier is one hundred and sixty feet in length, ten feet wide, five feet high, and filled with stone.

At McDonald's station, the main governing dam, one hundred and eleven feet long, was raised two feet. The sheeting on face was repaired and gravel and brush were deposited in front to prevent leakage. New flooring was laid in the slide and broken sills were repaired. Near the outlet of slide, numerous rock obstructions were removed from the timber channel, covering a distance of ninety feet. Six stop logs were made for the old slide which now serves as a waste gate. A side pier, forty-seven feet long, eight feet wide and five feet high, was built near the outlet of slide, acting as a glance to keep the logs and timber off the rugged shore of the island. Some of the bridges on the road leading to this station had to be repaired before supplies could be transported to the scene of operations.

Dumoine River, High Falls Station.—The flooring of the slide, having become badly worn, was replaced. The side of a glance pier was patched, and some rocks, which proved a serious obstruction in stages of low water, were removed from the timber channel, at foot of first chute.

The expenditure in 1907-8 amounted to $125.11.

Generally.—In the spring of 1907, the water in the Ottawa and its tributaries continued low until the end of April, when it began to rise, and during the month of May it rose steadily, attaining its maximum height about the 25th of that month. It

kept up well throughout the summer months, so that little difficulty was experienced in taking out the various 'drives' to the main stream.

The following statement, furnished by the Collector of Revenue in your department, shows the volume of business for the fiscal year:—

	Pieces.
Saw-logs	4,487,161
Boom and dimension timber	47,962
Cedars	31,546
Railroad ties	385,737
Fence posts	66,293
	5,018,699

Also 30,993$\frac{1}{10}$ cords of pulpwood and 24 cribs of flatted timber.

The revenue accrued on the above was $45,150.46.

STATEMENT showing Expenditure for Repairs on Ottawa River Works, also on Bridges at Ottawa, and Roadway and Bridge Approaches between Ottawa and Hull, for Fiscal Year ended March 31, 1908.

Names of Stations.	Province.	Electoral District.	Expenditure. April 1–Nov. 30, 1907		Expenditure. Dec. 1,'07–Mar. 31,'08		Expenditure. Apr. 1,'07–Mar. 31,'08	
			$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Ottawa River Works—Repairs.								
North Chaudiere Station	Quebec	District of Wright	327 22		1,595 81		1,923 03	
South " "	Ontario	City of Ottawa	516 01		621 61		1,137 62	
Chats Station	"	County of Carleton	.....		1 50		1 50	
Cheneaux Station	"	South Riding County of Renfrew	.....		11 40		11 40	
Mountain "	Quebec	County of Pontiac	.....		184 49		184 49	
Calumet "	"	" "	.....		348 38		348 38	
Ottawa River.				843 23		2,763 19		3,606 42
Gatineau River	Quebec	District of Wright	914 90		1,258 12		2,173 02	
Coulonge "	"	County of Pontiac	437 84		2,529 40		2,967 24	
Black "	"	" "	442 22		2,182 58		2,624 80	
Petawawa "	Ontario	N. Rid. of Co. Renfrew & Co. Nipissing	1,771 93		1,001 06		2,772 99	
Dumoine "	Quebec	County of Pontiac	37 75		87 36		125 11	
Tributaries of Ottawa River.				3,604 64		7,058 52		10,663 16
				Total for Ottawa River Works				14,269 58
Bridges at Ottawa, and Roadway and Bridge Approaches between Ottawa and Hull :—Repairs—								
Dufferin Bridge	Ontario	City of Ottawa	.....		150 00		150 00	
Chaudiere Slide Bridge	"	" "	422 67		105 75		528 42	
Union Bridge	Ont. and Que.	City of Ottawa and District of Wright	394 55		57 75		452 30	
Hull Slide Bridge	Quebec	District of Wright	.....		10 75		10 75	
Roadway and bridge approaches between Ottawa and Hull.	Ont. and Que.	City of Ottawa and District of Wright	4,196 98		700 66		4,897 64	
				5,014 20		1,024 91		
				Total for Bridges				6,039 11

OTTAWA RIVER WORKS OFFICE,
OTTAWA, June 30, 1908.

JOS. KENT,
Accountant.

REPORT OF ST. MAURICE RIVER WORKS.

(By F. X. Lefebvre, Superintending Engineer.)

EUGENE D. LAFLEUR, Esq.,
Chief Engineer, Department of Public Works,
Ottawa.

SIR,—I have the honour to submit the following report on the works done under my charge for the fiscal year ending March 31, 1908:—

The customary examination of the various structures on the St. Maurice river was made last fall after the drives were over, and the necessary repairs were carried out during the fall and winter months, so that everything would be in good order for the coming season of the driving and assorting of logs and for the opening of navigation between Grandes Piles and La Tuque.

La Tuque.—The construction of a wharf, 100 feet long by 25 feet wide, was started in the middle of December last, and the work was abandoned on January 27 last, on account of the water getting too high.

Pointe à Trudel.—The foundations of a new pier and one anchor pier, 25 feet by 20 feet by 8 feet, were built.

St. Jacques des Piles.—Two anchor piers, 25 feet by 20 feet by 8 feet, were built and small repairs made to piers, and 650 feet of spruce booms, 3 feet wide, covered with 3-inch pine deal, were constructed, and the connecting chains for them supplied.

Petites Piles.—Some 1,250 feet of British Columbia fir boom, 6 feet 8 inches wide and 16 inches thick, were built and the connecting chains for them supplied.

Rapide des Hetres.—The pier, commenced last year, was finished and the foundation of a new one was made. Some 500 lineal feet of spruce boom, 3 feet wide, covered with 3-inch pine deal, were constructed and the connecting chains for them supplied.

Pointe à Bernard.—The foundation of a new pier was made.

Shawinigan Slide.—The slide was repaired.

Shawinigan Lower Bay.—The retaining wall in front of the government house was repaired; one old pier was rebuilt from low water line. 400 feet of British Columbia fir booms, from 4 feet wide and 16 inches thick, were constructed, to lengthen the glance boom near Pointe à Chevalier, and about 500 feet of old booms were repaired; all the half-inch connecting chains were replaced by 1-inch chains.

Mouth of the River St. Maurice.—Two old piers were rebuilt from low water line; 1,800 feet of British Columbia fir booms, 3 feet wide, 14 inches thick, were constructed and the connecting chains for them supplied.

Generally.—The drives of the fiscal year 1907-8 were through early last fall, the water remaining high the whole season.

The total expenditure on this service during last fiscal year was $72,720.24.

REPORT ON THE SAGUENAY RIVER BOOMS.

(By J. C. Taché, Superintending Engineer.)

Saguenay booms are on the Saguenay river, about six miles above Chicoutimi.

In 1904-5, five piers, 45 by 25 feet, at bottom, with an ice breaker, facing the current, were built.

These piers were built of round logs, open-faced cribwork, sheathed with 6-inch spruce plank and fenders of 10 by 10, with boiler plate in front.

Amount expended, $18,000.

During the year 1905-6, the following booms were built in B.C. fir: 112 pieces, 80 feet long in three pieces of 12 by 12, 8 pieces 40 feet long, three pieces of 12 by 12, also ten booms of 20 and 30 feet, in spruce 10 by 10.

Every boom is planked with 3-inch spruce deals; chain B.B.B., proof anchors were also purchased.

Amount expended, $20,653.42.

During the year 1906-7, a scow, 60 by 14 feet, was built; three row-boats and six booms of 60 feet were also built in three pieces of spruce 10 by 10, planked with 3-inch spruce dea's. The two buildings on the ground of the booms were repaired.

Amount expended, $4,514.99.

During the fiscal year 1907-8, three pieces of booms 100 feet long, intended to serve as distributing booms, were built in British Columbia fir; 20 pieces 60 feet long, 3 feet wide, were also constructed in spruce. chains and anchors were bought.

Expenditure, $4,656.75.

BRIDGES AND ROADS.

It may be stated that, in the older provinces of the Dominion, the federal government has confined itself, as a rule, to take under its exclusive control and make provisions towards the construction and maintenance of important interprovincial road bridges and bridges required across waterways.

In the sparsely settled districts of the Northwest Territories, the government of Canada has undertaken to provide for the erection and maintenance of ordinary road bridges over large streams; bridges that are urgently needed to afford uninterrupted communication through trails and highways of national importance, which neither the municipalities to be more immediately benefited by the structures, nor the territorial authorities most directly concerned, could be expected to erect and maintain at their sole expense.

During the last fiscal year works have been executed on the following bridges:—

Ontario and Quebec.

BRIDGES AT OTTAWA AND ROADWAY AND BRIDGE APPROACHES BETWEEN OTTAWA AND HULL.

Repairs.

Dufferin Bridge.—An outlay chargeable to this bridge was incurred in payment of a balance due for sandstone paving blocks which was retained until the blocks were culled and laid.

Chaudière Slide Bridge.—At the Middle street approach to this bridge the granolithic sidewalk on south side, which is carried on steel beams, was jacked up and concrete pedestals were built underneath to support it. A suitable gutter of scoria blocks, laid in concrete, was made, and the road was properly graded with macadam. The roadway of the bridge grates and waterways were cleaned often and the iron guard rails were repaired.

Union Bridge.—The top covering of the sidewalk was renewed with 2-inch pine plank. The roadway was cleaned frequently, and the western portion was laid with hemlock plank, 3 inches in thickness.

Roadway and Bridge Approaches between Ottawa and Hull.—This thoroughfare was cleaned from time to time. The stone pavement was taken up where the foundation had settled, and relaid to grade. At the northerly end of the Union bridge, the iron guard-rail was extended further out over the parapet wall, and a permanent sidewalk was constructed, replacing the former one, which was of wood. The sidewalk is of granolithic, supported by 9-inch steel I beams and steel arched plates $\frac{3}{8}$-inch thick, which carry the concrete foundation. The walk is 242 feet long by 6 feet wide. Along the east side is a concrete curb, 9 inches wide and 11 inches high above the level of the sidewalk, with openings 2 feet wide at regular intervals, to drain off the water. The guard-rail consists of $1\frac{1}{2}$-inch iron steam pipes, carried by standards of $\frac{3}{4}$-inch iron, the bottoms of which are embedded in the concrete curb. The portions of the roadway between car rail and sidewalk was paved with scoria, and sufficient grates were put in to drain the roadway. The requisite number of steel beams and plates was purchased for the extension of the sidewalk farther northward, and this work will be undertaken at a later date.

Hull Slide Bridge.—The expenditure on this bridge was a small one, being for the usual cleaning of the roadway.

During the winter months, excessive accumulations of ice and snow were removed from the sidewalks and roadways of the bridges and approaches; 'pitch-holes' in the roadways were filled; and sand was spread on the sidewalks, when slippery, to guard against accidents to persons using them.

ONTARIO.

GRAND RIVER BRIDGE.

Grand river bridge is a highway bridge connecting the east and west banks of the Grand river, at the village of York, in the county of Haldimand, and is five miles from Caledonia, the nearest railway station.

Authority was received to expend by day labour the sum of $1,675 in repairs required to this bridge.

Work was commenced on October 1, 1907, and completed on January 30, 1908, and consisted of the placing of two rows of 6 by 12-inch pine stringers on the 165 feet of timber trestle approach to bridge; the renewal of a large amount of fillilng to earth approach; the placing of rubble stone rip-rap to protect earth embankment from erosion; the renewal of a portion of flooring on trestle approach and on spans; as also the placing of 40 iron knee braces, five on inside of each truss, for the purpose of strengthening upper chord, which had shown decided tendency to buckle.

Total expenditure from April 1, 1907, to March 31, 1908, $1,644.76.

NORTHWEST TERRITORIES.

Banff Bridge.—The work of painting and repairing the flooring of both the Bow and Spray river bridges at Banff was proceeded with, which very much improves the appearance of the bridges, preventing the corrosion of the metal, as well as the safety of the flooring. The colour selected, in order to combine with the pine and spruce trees thereabout, was green which has a good effect. The bridges are at present in fair condition, barring odd repairs that crop up.

The amount expended on the work done was $752.51.

CEMENT LABORATORY.

E. D. Lafleur, Esq.,
Chief Engineer, Public Works Department.

Sir,—I have the honour to transmit herewith the annual report of the cement laboratory for the fiscal year ended March 31, 1908.

I have the honour to be, sir, yours obediently,

(Sgd.) GEO. E. PERLEY,
Engineer in Charge.

Since March 31, 1907, all samples of cement and other building material submitted to this branch of the department have been fully tested and reported upon. In the past year 1,246 samples were submitted to this branch for test purposes, which number shows an increase of 411 samples, or 49·22 per cent over the same period last year.

Of the 1,246 samples tested, 1,177 were accepted and 69 were rejected. Of the 69 condemned, 36 were Rampart Slag cement, 18 were Star Portland cement and 15 were Belleville Portland cement.

The 1,246 samples were received from the following:—

Engineer of the Public Works Department	1,037
Railways and Canals Department	148
Cement and brick manufacturers	33
Transcontinental Railway	11
Intercolonial Railway	9
Contractors and private concerns	8

These samples received were of the following brands:—

Samson Portland cement, manufactured by the Owen Sound Portland Cement Co.	426
International Portland cement, manufactured by the International Portland Cement Co.	214
White Bros. Portland cement, manufactured English cement, imported from Europe	243
Belleville Portland cement, manufactured by the Belleville Portland Cement Co.	126
Rampart Slag cement, manufactured by the Sydney Cement Co., Sydney, N.S.	76
Monarch Portland cement, manufactured by the Lakefield Portland Cement Co.	70
Star Portland cement, manufactured by the Canadian Portland Cement Co.	43
Buffalo Portland cement, manufactured by the Calgary Portland Cement Co.	9
Vancouver Portland cement, manufactured by the Vancouver Portland Cement Co.	1
Elephant Portland cement, manufactured by English, imported from Europe	1

Building bricks. 24
Clay, marl, sand and stone. 4
Samples of cement unmarked. 9

The principal public works from which the above-named samples were received were:—

St. Andrews rapids, lock and dam, Manitoba.
Highway bridge, Shellmouth, Manitoba.
Breakwater at Cow Bay, Port Morien, N.S.
Breakwater, Port Burwell, Ont.
Breakwater superstructure at Port Stanley, Ont.
Breakwater, Bayfield, N S.
Quebec harbour improvements, Quebec, Que.
Work at Haileybury, Ont., and L'Ardoise, N.S.

PART IV.—APPENDIX 'A.'

INTERIM REPORT

ON THE

GEORGIAN BAY SHIP CANAL SURVEY

BY

Arthur St. Laurent, C.E.

OFFICE OF THE ASSISTANT DEPUTY MINISTER,
OTTAWA, January 7, 1909.

Hon. WILLIAM PUGSLEY,
Minister of Public Works,
Ottawa.

SIR,—I have the honour to submit herewith my annual report, in connection with the surveys and hydraulic investigations for a navigable waterway, 22 feet in depth, from Lake Huron to the head of ocean navigation on the St. Lawrence river at Montreal, via Georgian bay, the French river, Lake Nipissing and the Mattawa and Ottawa rivers.

I have the honour to be, sir,
Your obedient servant,

A. ST. LAURENT,
Assistant Deputy Minister.

GEORGIAN BAY SHIP CANAL SURVEY AND PROJECT.

During the last fiscal year, ending March 31, 1908, the office work connected with this project has been sufficiently advanced to permit of an interim report being issued, with full estimate of cost and sketch plans showing the proposed route. This report has been published in a separate volume, and is now available to the public, as well as the report on the precise levelling carried out in relation to the survey. The final report is in course of preparation and is nearly completed.

Survey.—In 1904, the sum of $250,000 was granted by parliament for the purpose of commencing a detailed survey of the proposed waterway from Georgian bay to Montreal, a distance of 440 miles.

This amount was made available at the close of the session, August 10 of the same year, and in accordance with the directions of Hon. C. S. Hyman, Minister of Public Works, and the instructions of the Chief Engineer, I assumed immediate charge and commenced at once the work of staff organization and the purchase of the necessary equipment.

My final instructions were, in order to fully meet the object in view, that the survey be of such a character that when the notes were reduced and plotted there could then be projected upon the plans the best location possible for a canal at least 22 feet in depth, with a bottom width of 300 feet, from which profiles could be drawn and a correct estimate made of the amount and character of material in excavation and embankment, nature of various foundations and final design of locks, dams, regulating works and other structures; also the right of way and definition of flooded area.

It was, moreover, understood that the whole of the information to be shown on the plans, as topography, contours, soundings, physical features of the route, &c., should be obtained from actual surveying, and that plans from previous partial surveys should be used only as preliminary information and for general guidance, with the exception of the French river section which had been surveyed in 1901 for the

department by the late J. W. Fraser for a 22-foot waterway. It will, however, be seen, in the final report, that supplementary surveys of the French river had to be undertaken on account of desirable changes in the project.

At such points where several possible routes for the canal existed and when the best location could not be determined by exploration alone, my instructions were to survey and develop the different routes in order to arrive at a selection, by comparison of their relative merits as to length, curvature, probable cost, &c.

To this end and to get the results within a reasonable time it was deemed necessary to place a large force of engineers in the field. The distribution of this force and the work accomplished will be detailed in the final report.

The formation of a board of engineers to direct and control the survey was discussed, but was finally abandoned, as it was decided that the work should be carried out under direct departmental control as an addition to the duties of the Chief Engineer, with a member of the permanent staff as engineer in charge and executive officer, and such temporary additional engineering help as would be required. In this way, no accounting office was organized, and all work in regard to the payment of accounts was performed by the accountant's branch of the department.

In order, however, to derive all the benefits conferred by a board of advisory engineers on all works of great importance and of unusual character, it was understood that the Chief Engineer, the engineer in charge of the survey and the district engineers, should form a nominal board to discuss all matters pertaining to the work, decide as to the general lines of the canal, size and character of locks, depth and width of channels, curvature, unit prices to be applied to quantities, &c., a conclusion to be reached only after the fullest discussion. This was with a view of giving more weight to the project as elaborated, more value to the final report and estimate of cost than would be the case should the decisions of important problems depend on the judgment of one man.

BRIEF DESCRIPTION OF PROJECT AND SUMMARY OF ESTIMATE OF COST FOR PROPOSED WATERWAY.

PROJECT.

The style of navigation proposed is known as the 'dam and lock system,' with slack water reaches between structures. The whole is designed on such lines as to enable boats of large size (600 by 50 feet by 20 feet draught) to pass from Lake Huron, through pond after pond to Montreal, the head of ocean navigation on the St. Lawrence river.

The project is essentially a river and lake canalization scheme, taking advantage of natural channels which fortunately can be made to form 80 per cent of the distance from Georgian bay to Montreal.

ROUTE.

Of the 440 miles of projected navigation between the above-mentioned points, from 410 to 420 miles follow the course of some river or lake.

For that part of the route from Georgian bay to the height of land separating the watersheds of the Ottawa river and the Great Lakes, a distance of 81 miles, the French and Pickerel rivers and Lake Nipissing are utilized. From Lake Nipissing, through the height of land, for a distance of 3½ miles, the route is an artificial waterway, with the exception of a few small lakes through which it is located.

This artificial cut leads into Trout lake, thence into Turtle lake, the Little Mattawan river and Talon lake, which is utilized as far as Sand bay at its eastern end, a

distance altogether of 21 miles. Trout and Talon lakes referred to above are very deep and fairly large bodies of water.

From Sand bay there is a canal for three miles to the Mattawa river, which river is utilized as far as the town of Mattawa, a distance of 13 miles, where another canal cut ¾ mile in length makes an entrance into the Ottawa river.

This river, which expands into large and deep lakes in many places, is followed all the way down to the foot of Lake of Two Mountains (Oka lake), a distance of 293 miles.

From the foot of Lake of Two Mountains to Montreal, a distance of 25 miles, either the St. Lawrence river or a branch of the Ottawa river called Rivière des Prairies, flowing north of the Island of Montreal, may be utilized. The former route has five miles of artificial waterway and the latter about 11 miles.

By the first route, the canal enters Montreal harbour at its upper end. By the second route the St. Lawrence ship channel is joined at Bout de l'Ile, some 11 miles below the eastern boundary of Montreal harbour, or 17 miles below the city custom-house.

DISTANCES.

Taking Port Arthur or Fort William as a starting point, the distance to Montreal, via the proposed waterway, is 934 miles; via Lake Erie and the Welland canal, 1,216 miles; via Buffalo and Erie canal to New York, 1,358 miles; giving a difference in favour of the projected route of 282 miles as compared with the present St. Lawrence route, and of 424 miles as compared with the Buffalo-New York route.

Comparing the distance from Fort William to Liverpool via Montreal and via New York, we have:—

	Miles.
Fort William to Liverpool via Georgian bay canal..	4,123
" " New York..	4,929

giving a difference of 806 miles in favour of the Georgian bay ship canal—Montreal route.

Other comparative distances can be found on the transportation map prepared in connection with the report. This map is now available.

TIME OF TRANSIT.

This is affected by the length of restricted channels on the route, where speed has to be reduced, and by the number of lockages and consequent delays. A close computation of the speed allowable in the different stretches, with about three-quarters of an hour delay for passage at each lock, gives about 70 hours, as time of transit from Georgian bay to Montreal, not including possible delays in meeting boats in restricted sections.

CHANNELS.

The total length of what may be termed canal cutting for the entire route is about 28 miles, by the project connecting with the St. Lawrence river above Montreal, through Lake St. Louis; and 34 miles, should the Rivière des Prairies route be selected.

The length of submerged channels to be excavated is about 66 miles, in stretches of varying lengths. Apart from this, there is an aggregate of 14½ miles of route where obstructions such as shoals, sharp bends, &c., have only to be removed to form very wide channels.

Therefore, of the 440 miles constituting the waterway, 108 miles will require excavation work, for locks, approaches, canals, submerged channels, &c., leaving 332 miles of natural river or lake channels, which will not require any improvement beyond the raising of the water surface as recommended in connection with the project.

Taking into account the 14½ miles of obstructions, which after removal will leave wide free channels, the route may be subdivided as follows, in relation to width:

	Miles.
Canal cuts, 200 to 300 feet wide, including necessary restrictions at locks	28
Improved channels, submerged sides, 300 feet wide	66
Free channels, 300 to 1,000 feet wide and over	346
Total	440

The relative length of canals and submerged channels may be varied slightly, as it is an open question as to the exact point where the one ends and the other begins.

The sides of all submerged cuts will be shown by piers or clusters of piles at suitable distances, to indicate the channel and to aid vessels in navigating. Along curves these piers will be provided with lights, and each different course will be defined by ranges.

The restricted channels are widened at all bends, and conditions for navigation in these restricted parts will be as good, it is expected, as on the St. Mary's river, or the St. Clair and Detroit river channels.

The depth of 22 feet selected for the waterway will more than equal the conditions as they exist to-day in the channels connecting the waters of the Great Lakes, the St. Mary's river, Hay lake, St. Clair Flats canal, and Detroit river.

The improvement carried out for these lake channels, since 1892, contemplated a depth of 20 feet below the mean water surfaces as determined up to that time. Since then, however, the prevailing water levels of Lakes Huron, St. Clair and Erie have been almost continuously below the mean stage as formerly determined, and in consequence the actual draft available on account of lake fluctuations has been only 17 to 19 feet. (Report of Chief of Engineers, U.S.A., Vol. V., 1907.)

It has therefore been found necessary to increase this depth, and some of these channels are now being deepened to 21 and 22 feet in order to obtain a safe 20-foot draft at all times.

The Georgian Bay Ship Waterway, therefore, with a minimum depth of 22 feet, will compare favourably with any of the channels above mentioned, which govern the draft of boats on the Great Lakes.

The mileage of excavation in canals and channels for the route may be subdivided as follows, for each class of material encountered:—

DRY EXCAVATION.

Rock, about	25 miles.	
Earth, about	13 "	
Mixed earth and rock, about	20 "	
		58 miles.

WET EXCAVATION.

Rock	18 miles.	
Earth	16 "	
Mixed earth and rock	16 "	
		50 miles.
Total		108 miles.

This mileage includes all points which are to be dredged or excavated, whether canal cuts, submerged channels or shoals. A small percentage of the excavation given as submarine rock work might possibly be done in the dry, and the cost therefore reduced. In the estimates, when doubt existed, the rock excavation has been invariably classified as wet rock.

TERMINAL HARBOURS.

As the harbour of Montreal forms the eastern terminus of the waterway, no special provision is made in the estimate for increased terminal facillities. By the time the waterway is completed, with the works now under construction and the extensive improvements proposed, the harbour will no doubt afford sufficient dockage facilities to meet the requirements of the increase in traffic contributed by the new route. As this traffic develops, facilities will be extended naturally as part of the harbour works.

The western entrance to the waterway on the Georgian bay is formed by French river harbour. As this will be only a transit point to and from terminal harbours already established, no terminal facilities are required other than improvements in certain parts of the entrance, and increased aids to navigation. These improvements are included in the estimate.

SUMMIT.

The summit level embraces Lake Talon, the Little Mattawan river, Turtle and Trout lakes, their present surfaces being raised to elevation 677. Talon lake will be raised 41 feet, and Trout and Turtle about 15 feet above their present level. The locks at both ends of the summit are designed to allow of the large lake thus created being lowered to elevation 671 without interfering with navigation. In fact, besides affording a wide and unobstructed route for shipping in transit, the lake will have two important duties; to absorb in part the excess in floods, and to store the reserves for the months of deficient water supply.

From the careful hydraulic investigations made, the available supply from the summit watershed, with the storage provided, will be 540 cubic feet per second throughout the season of navigation, which will allow of an average of 24 passages per day or 5,040 passages for the season.

As the traffic develops, in the event of this supply being insufficient to meet the demand upon the summit, the supply can be augmented by 700 cubic feet per second during the period of low water by creating storage reserves at the head of the Amable du Fond river, and diverting it from its present outlet into the summit lake. This can be accomplished at an expenditure of $900,000.

These two sources of supply will more than meet the requirements at the summit, should the waterway ever be worked to its full commercial capacity.

LENGTH OF NAVIGATION SEASON.

From the investigations made, the opening and closing of navigation for the waterway would coincide closely to the opening and closing of ocean navigation for the harbour of Montreal, the length of the season being perhaps a few days shorter.

This would be governed by Lake Nipissing and conditions at the summit and the Mattawa reaches, and the indications are that an average of 210 days would be available.

LOCKS.

The difference in elevation of 659 feet between Montreal and the summit level, and of 99 feet between the summit and Georgian bay is overcome by 27 locks ranging in lift from 5 to 50 feet. By the Rivière des Prairies route, however, this number is reduced to 26.

All locks are designed to be built of concrete.

Regarding their size, lake boats have attained a length of over 600 feet, and the minimum dimensions of lock chambers should not be less than 650 feet in length, by 65 feet in width. The estimated cost of the locks is based on these dimensions, but in the final report the additional cost of building them 800 feet in length by 75 feet in width, should it be found desirable, will be given. In all cases the depth of water on the sills will be 22 feet at extreme low stage.

DAMS.

The navigation scheme requires the building of 18 main dams and 27 subsidiary dams of various sizes, not including those which will be required in connection with a system of storage reservoirs.

Generally, where the quantity of water is much above the canal requirements, the rock fill type of dam has been adopted. Where, however, it is important to economize water for lockages, concrete dams have been designed. The estimate of cost is based on these types of dams, and the stop-log system of regulation sluices has been adopted throughout, with the exception of a few locations where Stoney sluices are deemed necessary.

STORAGE.

Intimately connected with the navigation scheme is the question of control of the flood waters of the Ottawa river. This would be of great benefit to navigation as well as to industries along the river depending on water power. It is intended to effect this by creating large storage reservoirs, so regulated that during flood season they will retain a portion of the surplus waters, which will be gradually released during low water periods. This question will be discussed in the final report, but cannot be closed, as a complete solution of the problem will require more extended investigations than it has been possible to make so far.

WATER POWERS.

The present plans for the construction of the canal entirely alter the general features of the river. For the purpose of lockage, the falls are concentrated, and all of the small rapids obliterated. The dams built for navigation purposes, by concentrating the fall at one point, eliminate the greatest difficulty in the development of the water powers. In addition, the needs of navigation require the elimination of extreme high water by the construction of a system of storage reservoirs at the upper reaches of the Ottawa river and its main tributaries, the water stored to be released at low water period, thus increasing the average low flow for power purposes.

The data collected up to date shows that nearly 1,000,000 horse-power can be secured along the Ottawa and French rivers by the improved method of development. It is doubtful if more than 150,000 horse-power at minimum flow could be developed under present conditions.

This question of water powers is still being investigated, as some more data has to be collected.

It may be mentioned, however, that the Chaudière powers are not interfered with by the project. In the case of undeveloped water powers which are destroyed, and which have been leased or sold by the Ontario or Quebec governments, a certain sum has been placed in the estimate to cover possible claims. No doubt, in many cases, it will be possible to compensate the claimants by giving them power privileges at some of the dams built in connection with the project.

The final report will give all the information available regarding this question.

DAMAGES.

On several of the reaches, considerable land will be flooded permanently. Most of this land is now every year inundated from four to six weeks. The area so flooded has

been computed for each reach, and the amount to be paid, included in the estimate at a fair value per acre. In the case of damage to buildings, the cost of their removal to higher ground or purchase has been considered and provided for.

CONSTRUCTION.

A careful analysis of the work to be performed shows that it would take from three to five years to develop all contracts and place the whole route under active construction. Some of the sections, where heavy submarine excavation is encountered, would require at least five years to complete, under the best conditions of labour and equipment. It may be fairly stated, therefore, that a period of ten years from inception would be necessary to open the waterway to navigation. This would mean an average expenditure of about $10,000,000 per year.

UNIT PRICES.

For the various items that appear in the estimate of cost, the prices were adopted after careful consideration, and they conform generally to the prices paid by the department for similar work. These prices have been altered, where necessary, to meet special conditions of location and character of the work to be performed.

SUMMARY OF ESTIMATED COST FOR A NAVIGABLE WATERWAY 22 FEET DEEP FROM MONTREAL TO GEOGIAN BAY VIA THE OTTAWA, MATTAWA AND FRENCH RIVERS.

ROUTE A.

Via Montreal, Lake St. Louis, Ste. Anne de Bellevue, Ottawa, Rocher Fendu channel, Coulonge, Pembroke, Des Joachims, Mattawa, Talon lake, North bay, Lake Nipissing and French river.

Locks, dams, channels, piers, lighting, damages	$88,626,108
Contingencies, engineering, administration, say 10%	8,862,892
Storage of flood waters, regulation basins, telephones, &c.	2,200,000
Total	$99,689,000
Feeder at Summit, when required	900,000

ROUTE B.

Same as route A, excepting that Rivière des Prairies, north of Montreal Island, is followed instead of Lake St. Louis and St. Lawrence river above Montreal.

Locks, dams, channels, piers, lighting, damages	$83,354,508
Contingencies, engineering, administration, say 10%	8,335,492
Storage of flood waters, regulation basins, telephones, &c.	2,200,000
Total	$93,890,000
Feeder at Summit, when required	900,000

NOTE.—Land damages are partly covered by estimation and partly by contingencies. In most cases of undeveloped water powers, it has been assumed that owners could be compensated by being granted power privileges at nearest dam. Cost of damages, at best, cannot be well defined. In ten years from now, it is likely that damages to pay would be much larger, as conditions on the river would be much more involved. This amount cannot be well foreseen. It might be larger than estimated by one or two millions according to conditions at the time of construction and legal view taken of some of the claims.—A. ST. L.

SUMMARY OF ESTIMATE OF COST BY ITEMS.

ROUTE A.

Description.	Quantity.	Unit Prices.	Cost.
Rock excavation, submarine	cubic yds. 8,322,554	$1.50, $3.00 and $3.50	$23,982,780
" dry	" 18,574,496	$1.00 and $1.50	19,587,750
Earth excavation, dredging	" 8,935,667	20, 25, 30 and 35 cts.	2,140,073
" dry	" 10,836,537	20, 30, 35 and 45 cts.	3,223,690
Concrete in dams, locks and entrance piers	" 1,841,259	$ 7.50	13,810,493
" second class	" 60,698	4.50	273,139
Granite masonry in locks	" 2,474	50.00	123,700
Rock fill work (dams, embankments and behind cribs and walls)	" 7,880,652	0.50	3,940,337
" (rip-rap and borrow pit)	" 510,088	1.00	510,088
Bank lining	" 114,300	2.00	228,600
Earth fill (dams, embankments and back of walls)	" 3,770,078	5, 10, 15, 25, 40, 50 and 60 cts.	984,229
Cribwork	" 1,910,102	$3.00 and $3.50	6,191,405
Timber mattress	" 84,583	$1.35	114,186
Stop-logs, regulating works and machinery			1,849,680
Unwatering			354,976
Lock gates (steel)			2,610,106
Equipment and power			875,920
Bridges, railway crossfngs			1,462,882
Lighthouses, guide piers, lighting			879,734
Damages to land and water supply powers, drainage, railway and highway diversions, &c			5,482,340
Total			$88,626,108
Contingencies, engineering, administration, say 10 %			8,862,892
Storage of flood waters, regulation basins, telephones, &c			2,200,000
Total			$99,689,000
Feeder at Summit, when required			900,000

ROUTE B.

Total estimated cost			$93,890,000

A recommendation was made about a year ago to the effect that a board of two or three of the engineers connected with the project should be commissioned to visit some of the larger river canalization and ship canals existing or at present under construction and collect data as to the results achieved and desirable improvements gained from actual experience. No action was taken on this recommendation, but I am still of opinion that, for a work of such magnitude as the proposed undertaking—one of the largest in the world—it would be in the interest of the government, before commencing construction, to commission some of its engineers to study the world's experience in the development of waterways and works connected with them.

It is hoped that the final report will be available during the next session of parliament. The numerous maps and plans which will accompany the report are practically now all complete and are being lithographed.

The only question which will not be treated fully in the report is that relating to the storage of the flood waters of the Ottawa river. The study of this question has to be continued, and supplementary reports will be issued as the collection of the necessary data progresses.

I have the honour to be, sir,

Your obedient servant,

A. St. LAURENT,

Asst. Deputy Minister and Engineer-in-charge.

PART V

REPORT ON GOVERNMENT TELEGRAPH LINES

FOR THE

FISCAL YEAR ENDED MARCH 31, 1908

DEPARTMENT OF PUBLIC WORKS,
OFFICE OF THE GENERAL SUPERINTENDENT,
OTTAWA, ONT., November 30, 1908.

NAPOEON TESSIER, Esq.,
Secretary, Department of Public Works.

SIR,—I beg to submit herewith my report on the Government Telegraph Service for the fiscal year ended March 31, 1908.

This report, as usual, is prefaced by a list to the present date of the land lines and cables in operation; with data of lengths, year of construction, number of offices at present established, and an estimate of the traffic handled in each instance.

The usual tabular statements giving list of offices, operating staff, &c., in the several districts are appended to the report; likewise the tariff sheets, showing the rates charged for messages on the several lines.

I have the honour to be, sir,
Your obedient servant,

D. H. KEELEY,
General Superintendent.

THE GOVERNMENT TELEGRAPH SERVICE.

DOMINION OF CANADA.

HEAD OFFICE: DEPARTMENT OF PUBLIC WORKS, OTTAWA.

(October 1, 1908.)

EXECUTIVE.

The Hon. William Pugsley, Minister of Public Works.
J. B. Hunter, Esq., Deputy Minister of Public Works.

STAFF AT HEADQUARTERS.

D. H. Keeley, General Superintendent.
M. W. Crean, Technical Assistant to Superintendent.
J. E. Gobeil, Technical Assistant to Superintendent.
Miss A. Hardcastle, Secretary to General Superintendent.
J. P. Demartigny, Accountant, Telegraph Branch.
S. E. Bray, Assistant Accountant, Telegraph Branch.

GENERAL INSPECTORS.

A. B. McDonald, Meat Cove, Cape Breton, lines in Nova Scotia and New Brunswick.
J. S. Macdonald, Kamloops, B.C., lines in Northwest and south British Columbia.

SUPERINTENDENCIES.

Edwin Pope, Quebec, dist. supt., North Shore and G.N.W. traffic.
J. C. Taché, dist. supt., Chicoutimi district and North Shore to Bersimis.
E. H. Tetu, Long Point of Mingan, dist. supt., North Shore, East Bersimis.
P. Pouliot, dist. supt., Quarantine line, &c., to Grosse Isle.
A. Malouin, dist. supt., West Point, Anticosti Island.
A. Le Bourdais, Grindstone, dist. supt., Magdalen Islands.
D. C. Dawson, St. John, N.B., dist supt., Cape Breton system.
Mrs. C. C. Seely, Grand Manan, N.B., dist. supt., Bay of Fundy system.
J. McR. Selkirk, Leamington, Ont., dist. supt., Pelee Island system.
Robt. C. Macdonald, Qu'Appelle, dist. supt., Northwest Territories.
Wm. Henderson, Victoria, dist. supt., British Columbia, south.
C. S. Stevens, Kamloops, B.C., supt., Penticton line.
J. T. Phelan, Vancouver, B.C., supt., Yukon system.
H. Gilchen, Whitehorse, Y.T., acting dist. supt., Atlin-Boundary.

GOVERNMENT TELEGRAPH SERVICE.

Location of Lines.	Points connected.	Year.	Length of Lines.			Number of Offices.	Messages Sent.
			Land Lines.	Cables.	Total.		
			Miles.	Kt's.			
Newfoundland..	Port au Basque—Cape Ray	1883	14	.....	14	2	
Nova Scotia....	North Sydney—Meat Cove (with loops)..	1880-02	$167\frac{1}{4}$	.....	$168\frac{1}{4}$	18	
"	Across Bras d'Or channel	1880	.....	$\frac{1}{4}$			
"	" St. Ann's Harbour	1887	....	$\frac{1}{4}$			
"	" Ingonish Harbour	1887	.....	$\frac{1}{4}$			
"	Big Bras d'Or—Kempt Head	1904	20	..	20	3	
"	Meat Cove—St. Paul's Island	1890	.....	20	23	1	
"	On St. Paul's Island	1890	3	...			
"	Mabou—Meat Cove	1887-00	109	.....	109	9	
"	Barrington—Cape Sable	1883	16	.....		Leased.	
"	Across Bear Point Channel	1883	..	$1\frac{1}{2}$	$17\frac{3}{4}$		
"	" Lt. House Channel	1883	.....	$\frac{1}{4}$			
"	Mabou—Port Hawkesbury	1903	$41\frac{3}{4}$	.....	$73\frac{3}{4}$	16	
"	Port Hawkesbury—St. Peters	1903	32	.....			
"	St. Peters—Main-à-Dieu	1904	$81\frac{1}{4}$	.....	$125\frac{3}{4}$		9,500
"	Main-à-Dieu—Scatarie	1902	.....	$1\frac{3}{4}$			
"	On Scatarie Island	1904	$7\frac{1}{4}$	.....			
"	Gabarous—North Sydney	1904	$35\frac{1}{2}$	....	36	13	
"	Little Bras d'Or—Kempt Head	1905	36	.....			
"	North Sydney—Eskasoni	1905	$37\frac{1}{2}$	....	$37\frac{1}{2}$		
"	North Sydney—Little Bras d'Or (second wire)	1906	6	.....	6	.....	
" ...	Grand River—Enon	1907	$19\frac{1}{2}$	.....	$19\frac{1}{2}$	2	
	Port Hood, Island Branch: (Length of construction in loop.)						
"	On mainland at Port Hood	1907	$\frac{1}{2}$	.....			
"	Port Hood—Smith's Island	1907	.....	2			
"	On Smith's or Inner Island	1907	4	.....	$13\frac{1}{2}$	2	
"	Smith's Island to Henry Island	1907	.. ...	3			
"	On Henry or Outer Island	1907	4	.....			
New Brunswick.	Chatham—Escuminac	1885	$42\frac{1}{4}$	.....	$42\frac{1}{4}$	6	750
	Bay of Fundy System:						
"	Eastport—Campobello	1880	.....	$1\frac{3}{4}$			
"	On mainland Eastport	1880	$\frac{1}{2}$	.....			
"	On Campobello Island	1880	$7\frac{1}{2}$	....			
"	Campobello-Grand Manan	1880	.....	$7\frac{1}{4}$	$44\frac{1}{4}$	10	2,500
"	On Grand Manan Island	1880	$25\frac{1}{4}$	.....			
"	Grand Manan—Cheney's Island	1890	....	$\frac{1}{2}$			
"	On Cheney's Island	1890	$\frac{3}{4}$	....			
"	Cheney's Island—Whitehead Island	1890	.....	$\frac{3}{4}$			
"	Partridge Island—Fort Dufferin	1900	.....	$\frac{3}{4}$	$\frac{3}{4}$		
Quebec.....	Bay St. Paul—Chicoutimi	1881-04	98	.....	98	6	
"	St. Alexis—St. Catherines Bay	1904	78	.....	78	5	
"	Murray Bay—St. Agnes	1904	$14\frac{1}{2}$	.....	$14\frac{1}{2}$	2	
"	Bay St. Paul—Petite River	1904	13	.....	13	1	
"	Chicoutimi—St. Charles	1903	37	.....	61	10	
"	St. Anne—Lac Claire	1903	15	.....			
"	St. Anne—St. Fulgence	1903	9	.....			
"	St. Fulgence—Sacré Cœur	1905	$57\frac{1}{4}$	.....	$57\frac{1}{4}$	4	
"	Murray Bay-St.Catherines Bay (2ndwire)	1904	$44\frac{3}{4}$	.....	$44\frac{3}{4}$	.....	
"	St. Alexis—Chicoutimi (2nd wire)	1905	$14\frac{1}{2}$	.....	$14\frac{1}{2}$	.....	15,550
"	St. Charles—St. Henri de Taillon	1907	$24\frac{1}{2}$	.....	$24\frac{1}{2}$	4	
	North Shore Line:						
"	Murray Bay—Chateau Bay	1881-01	$1,028\frac{1}{2}$	..			
"	Across Saguenay River	1883	.....	$1\frac{1}{4}$			
"	Bersimis to Manicouagan	1883	.....	12	1090	66	
"	Manicouagan to Godbout	1883	.....	26			
"	Chateau Bay—Belle Isle	1901	...	$22\frac{1}{4}$			
"	Bersimis—Godbout (alternative line)	1904-05	80	....	80		

GOVERNMENT TELEGRAPH SERVICE.—*Continued.*

Location of Lines.	Points connected.	Year.	Length of Lines.			Number of Offices.	Messages Sent.
			Land Lines.	Cables.	Total.		
			Miles.	Kt's.			
	Quarantine System:						
Quebec	Quebec—L'Ange Gardien	1885	13	...			
"	L'Ange Gardien—Orleans Island	1885	...	¾			
"	On Orleans Island	1885	29¼	...			
"	Orleans Island—Isle Réaux	1889	...	2	52¾	8	2,000
"	On Isle Réaux	1889	2½	...			
"	Isle Réaux—Grosse-Isle	1889	...	2			
"	On Grosse Isle (all told)	1885-94	3½	...			
"	St. Jean—St. Famille (loop)	1904	5½	...	5½	1	
"	St François—Baie St. Paul	1906	...	30	30		
"	Crane Island to Montmagny	1905	...	3½	3½		
"	Crane Island to Grosse-Isle	1907	...	5	5		
	Anticosti System:						
...	Gaspé—L'Anse à Fougère	1881	28	...			
"	L'Anse à Fougère—Anticosti	1881	...	44¼	316½	9	800
"	On Anticosti Island	1881-90	223¾	...			
"	Anticosti—Long Point, Mingan	1890	...	21			
	Magdalen Island System:						
...	Meat Cove, C.B.—Magdalen Islands	1880	...	55			
"	On Magdalen Islands	1881-02	83½	½			
"	Grosse Isle—Bryon Island	1902	...	11			
"	Bryon Island—Anticosti	1902	...	*	158	13	2,200
"	On Bryon Island (Loop)	1903	1	...			
"	House Harbour—Pointe Basse (Loop)	1902	4	...			
"	Pointe Basse—South Beach (Loop)	1905	3	...			
	Pelee Island System:						
Ontario	Leamington—Point Pelee	1889	12	...			
"	Leamington Dock—Pelee Island	1901	...	17	42½	10	1,500
"	On Pelee Island	1889-00	13½	...			
Northwest	Qu'Appelle—Edmonton	1883	625	...	625	16	
"	Moosejaw—Wood Mountain	1885	90½	...	90½	2	
"	Wood Mountain—Willow Bunch	1904	38	...	38		
"	Edmonton—Indian Ag. & Stoney Plain	1904	24	...	24	5	
"	Edmonton—Athabaska Ldg	1904	98	...	98		
"	Duck Lake—Batoche	1902	9	...	12½	3	18,000
"	Duck Lake—Indian Agency	1902	3½	...			
"	Edmonton—St. Albert	1887	9	...	36	3	
"	St. Albert—Qui Barre and Alexandria	1902	27	...			
"	Lloydminster (loop) near Pitt	1904	22	...	22	1	
"	Victoria—Andrew and Whitford	1904-05	11½	...	11½	2	
"	Qu'Appelle—Lipton (Loop)	1906	11	...	11	1	
"	Saddle Lake—Industrial School	1900	6½	...	6½	1	
"	Kamsco—Indian Agency	1907	6½	...	6½	1	
British Columbia	Victoria—Cape Beale	1891	118	...	118	6	1,600
"	Nanaimo—Comox	1893	81	...	81	10	
"	Parksville—Alberni	1895	29½	...	86½	2	9,500
"	Alberni—Cape Beale	1899	57	...			
"	Alberni—Clayoquot	1902	96¾	...	96¾	9	900
"	Kamloops—Lower Nicola	1899	67	...	67		1,000
"	Lower Nicola—Penticton	1905	168	...	168	32	4,500
"	Vernon—Kilowna	1905	35	...	35		750
"	Kilowna—Penticton	1906	45	1½	46½		
"	Golden—Windermere	1901-02	92	...	92	4	1,500
"	Duncan Sta.—Salt Spring Isl. & Extens.	1902-04	24	¾	24¾	5	500
	Vérnon—Lumley	1907	18	...	18	1	

* This cable section, 93 knots, was withdrawn in 1906.

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GOVERNMENT TELEGRAPH SERVICE—*Concluded.*

Location of Lines.	Points connected.	Year.	Length of Lines.			Number of Officers.	Messages Sent.
			Land Lines.	Cables.	*Total.		
			Miles.	Kt's.			
Yukon	Ashcroft—Dawson and Boundary	1899-01	1845				
"	Hazelton—Port Simpson and Aberdeen	1901-02	202½				
"	Tagish—Cariboo Crossing	1901	18				
"	150 mile Sta.—Quesnelle Forks	1902	64	....	2,252½	68	32,000
"	Ashcroft—Lillooet	1896	62				
"	Quesnelle—Barkerville	1887	61				
"	Ashcroft—Quesnelle (local wire)	1878-87	215	.....	215		
	Total	.....	6,929¼	296¼	7,225½	393	105,000

* For convenience in totalling, the knots of cable are regarded as statute miles.

REPORT ON THE GOVERNMENT TELEGRAPH SERVICE, 1907-8.

EXPLANATORY NOTES.

The tabular statement prefacing this report shows the total mileage, &c., of the telegraph lines operated by the government. Lines that have been subsidized or constructed and transferred by the government for operation by private companies are not included in this list.

The matter in the following pages comprises a statement of specific actions taken in the course of the year; and as was the case in the reports of the past two years, the particulars are given in separate reports hereto subjoined, that have been obtained, where practicable, from the district superintendents, and will be found indicated under the several division headings. In any case where no particular reference is made to a line, found in the above-mentioned list, the understanding intended to be conveyed is that the line has been satisfactorily operated throughout the year, without any change of conditions since last made mention of in the annual reports

NEWFOUNDLAND.

The line from Port au Basque to Cape Ray continued to be operated as heretofore, under the arrangement with the Anglo-American Telegraph Company.

MARITIME PROVINCES.

Cape Breton.—In August, 1907, connection was made with the lighthouse at the outer Port Hood island by a double line of wire with cable stretches forming a loop from the Port Hood office for inclusion in the main line circuit. A one knot length of twin core cable, that had originally been intended for another purpose, was used here between the mainland and the Inner island. The several lengths of cable and line wires are given in the list prefacing this report.

A branch line operated from the office at Grand River was, in the course of the season of 1907, built along the roadway to Loch Lomond (12½ miles) and Enon (4 miles further on). This line, it is intended, shall be carried through to Victoria bridge; and thence to Gabarus so as to afford an altlernative route for the traffic of that section. Offices were opened at Loch Lomond, with Mrs. J. Fraser as agent-operator, February 19, 1908; and at Enon, March 3, 1908, temporarily in charge of the teaching operator, Miss Bingham, with Mrs. E. McDonald appointed for the agency.

Mention of what other new offices were opened or staff changes made on the Cape Breton lines will be found in the report of the district superintendent, Mr. D. C. Dawson, which is hereto appended (No. 1).

In the course of last autumn the pole line between Meat Cove and Ingonish was renewed, native wood (tamarac) obtainable along the route being utilized for the purpose, as on former occasions.

St. Paul's Island cable.—This connection again became interrupted on January 7, 1908, and had to await the service of the repair ship.

NOTE.—As early as practicable after the ss. *Tyrian* was put in commission for the season, attention was given to this cable and communication was restored on June 13, 1908.

Magdalen Islands.—The cable between Meat Cove and Old Harry, which was broken and repaired the year before, suffered another interruption on May 31, 1907.

The ss. *Tyrian* was as promptly as possible sent to attend to it and repair was made on July 11, following. The appended report (No. 2) of the district superintendent, Mr. A. LeBourdais covers the local conditions and operation of the land line sections throughout the year.

Bryon Island cables.—The Bryon Island-Grosse Isle (Magdalen Islands) stretch that was, as mentioned in last year's report, after a lengthy interruption, repaired on July 28, 1906, has since continued in good working order. The remainder of the other section, Bryon to Anticosti, was picked up by the ss. *Tyrian* in the course of the season of 1907, and has been retained in her tank aboard and drawn upon as occasion required for the making of repairs, &c., in other localities.

Anticosti Island.—See report (No. 3) from the district superintendent, Mr. A. Malouin, hereto annexed. The cables connecting with the island continued in good working order throughout the year.

BAY OF FUNDY.

Since the repair made in the Grand Manan-Campobello section in May, 1907, the several cables of the Bay of Fundy system continued in good working order up to the close of the fiscal year. The conditions obtaining with and operation of the land lines are fully dealt with in the accompanying report (No. 4) from the district superintendent, Mrs. C. C. Seely.

NORTH SHORE AND CHICOUTIMI.

The working conditions, as set forth in last year's report, have continued satisfactory and undisturbed. A further extension of the Chicoutimi-St. Charles branch and some general repairs to roadways and bridges, necessary to the upkeep of the telegraph line in several sections of the Chicoutimi district, will be found dealt with in the annexed report (No. 5) from the dstrict superntendent, Mr. J. C. Taché.

Along the north shore, east of Bersimis to the Straits of Belle Isle, the line has been maintained in satisfactory order. Repair gangs under the foremanship of the regular lineman in the several sections, performed, as has been customary each year, whatever work in the way of general overhauling and clearance of the line and the renewal of bridges, shelter huts, &c., that was called for in the several sections.

Changes and appointments, where any have been made, will be found noted in the tabular statement of officers, agencies, &c., in the appendix.

QUARANTINE SYSTEM.

Crane Island connection.—As an alternative to the Crane Island-Montmagny cable which, owing to liability to damage from vessels anchors, was not found to be sufficiently reliable, the ss. *Tyrian* when in the vicinity on other work laid down, in September, 1907, a length of 5:12 knots between Crane Island and Grosse Isle, forming an extension of the quarantine telegraph system.

Both of these cables as well as the Ange Gardien section, became interrupted in the course of the winter and were again put in order by the local superintendent as early as practicable after the ice had passed down in the springtime. NOTE.—The periods of inoperation were as indicated hereunder, the repairs not having been made until after the close of the fiscal year:—

SECTION.	INTERRUPTED.	REPAIRED.
Crane Island—Grosse Isle	January, 1908	17th May, 1908
Crane Island—Montmagny	December, 1907	5th June "
Ange Gardien—St. Pierre	" "	12th May "

Isle aux Coudres cable.—This cable also became interrupted in December, 1907. (It was repaired by Mr. Pouliot, the district superintendent, on June 20, but the telephone apparatus on the island needed overhauling and was subsequently restored to working order).

Bay St. Paul-St. François cable.—This cable was also thrown out of order by the action of ice in December, 1907, and as its restoration would necessitate the services of the ss. *Tyrian*, and the occasion for the maintenance of the connection had in the interval, since its being laid, been for the most part set aside by the con-joint tariff arrangement effected with the G.N.W. Telegraph Company, as mentioned in last year's report, further action in regard to it has been deferred.

Particulars as to the operation and upkeep of the quarantine system as a whole will be found in the accompanying report (No. 6) from Mr. J. P. Pouliot, district superintendent at St. Jean, Island of Orleans.

ONTARIO.

Pelee Island line.—The Pelee Island cable was again interrupted on February 10, 1908, and so continued until after the close of the fiscal year. (To effect a repair on this occasion it was found necessary to provide a new length of a ½ knot to replace some damaged portions. Communication was restored by the district superintendent on June 15).

With a view to improving the service and to render it of greater usefulness to the community, arrangements are being made for the re-construction of a part of the mainland section and the division of the mainland and island portions into two separate circuits so as to admit of the establishment of an additional number of telephone stations in both divisions.

The appended report (No. 7) from Mr. J. McR. Selkirk, district superintendent at Leamington, will be found to contain, barring the period of interruption, a satisfactory showing as to the maintenance and operation of the system during the year.

NORTHWEST, BRITISH COLUMBIA AND THE YUKON.

The separate reports (Nos. 8-12) appended hereto from the respective district superintendents, will be found to convey an account of what has been done in these divisions of the service in the course of the fiscal year. The whole, as was the case for the previous twelve months, affords a very satisfactory showing.

TELEGRAPH SERVICE GENERALLY.

Cable ship Tyrian.—It is with the greatest regret that mention has to be made of a deplorable accident that occurred on November 28, 1907, in the railway yard at Halifax whereby the able commander of our cableship lost his life. The late Captain O'Leary will long be lamented.

The *Tyrian* had a busy and successful season, as will be seen by reference to the report (No. 13) in the appendix from Mr. A. B. McDonald, who, as in several previous years, performed the duties of electrician.

Since the decease of the late Captain O'Leary the ship has been in charge of Captain Alex. Dixon, former first officer. The general overhauling that the ship received in the course of the winter of 1906-7 rendered her fit for sea at short notice and she was to that extent in readiness for service at the close of the fiscal year.

Telegraph Systems of the Dominion.—As a matter of general interest, pursuant to the statement submitted last year, the latest figures to hand showing the extent of telegraph lines in operation in the Dominion are given hereunder:—

Canada.	Length of Lines in Miles.			Length of Conductors in Miles.			Number of offices.
	Aerial.	Underground.	Total.	Aerial.	Underground.	Total.	
Great North Western Telegraph Co	11,775	.....	11,775	48,652	.....	48,652	1,360
Canadian Pacific Telegraph	10,292	2	10,294	50,952	57	51,009	1,150
Western Union Telegraph Co	2,610	28	2,638	9,805	44	9,849	219
Government Telegraph Service	6,929	.....	6,929	6,929	.....	6,929	393

REVENUE AND EXPENDITURE.

The revenue and expenditure for each of the government lines in the several districts hereinbefore mentioned are given in the following table:—

1907-08.	Expenditure.	Revenue.	Remarks.
	$ cts.	$ cts.	
Lower St. Lawrence and Maritime Provinces :—			
Anticosti lines	2,973 89	1,325 53	
Bay of Fundy	1,688 21	822 91	
Gaspé Local	.....	24 66	
Escuminac	1,010 16	218 11	
Magdalen Islands	5,247 27	1,473 26	
Father Point Agency	500 00		
Cape Breton lines	18,053 17	3,031 20	
North Shore (E.B.)	18,101 51	5,198 94	
" (W.B.)	13,017 77	2,251 36	
Quarantine system	4,332 80	508 01	
Cable ship *Tyrian* :—			
Maintenance and repairs	49,621 68		
Subsidies, stationery, line and office material and contingencies	12,224 49		
Gulf general			
Ontario :—			
Pelee Island line	588 09	253 35	
Northwest Territories lines	31,667 83	7,132 87	
British Columbia :—			
Alberni-Cape Beale	344 00	59 88	
Alberni-Clayoquot	3,834 27	668 01	
Golden-Windermere	2,855 93	1,036 25	
Kamloops,-Nicola,-Penticton Vernon-Kelowna	7,663 10	12,466 79	
Nanaimo-Comox	3,542 18	4,291 77	
Vancouver-Salt Spring	139 82	305 27	
Victoria-Cape Beale	6,018 12	923 40	
B. C. service generally	3,602 06		
Yukon :—			
Ashcroft-Dawson	196,997 08	80,440 96	
Telegraph service generally	2,543 91		
Total	386,567 34	122,432 53	Signal Service messages, Meteorological Service messages and reports, and Fisheries bulletins are handled free of tolls.

DEPARTMENTAL TELEPHONE SERVICE.

At the end of March, 1908, the telephone connections with the central offices of the Bell Telephone Company at Ottawa, listed as chargeable to the special appropria-

tion, numbered 337, the annual charge for which amounts to $13,651.25. The connections are distributed amongst the several departments as hereunder:—

Department.	Offices.	Residences.	Annual charge.
			$ cts.
Agriculture	8	5	515 00
Auditor General	7	1	270 00
Census Branch	1	1	85 00
Customs	7	2	370 00
Dominion Police	8	3	433 00
Exchequer Court	1	2	120 00
Finance	5	4	370 00
Governor General (including private system)	5	3	432 75
House of Commons	15	3	777 50
Indian Affairs	4	1	205 00
Inland Revenue	4	3	320 00
Interior (including line to Observatory)	37	6	1,675 00
Geological Survey	3	2	185 00
Justice	6	11	653 00
Labour Department	1	3	155 00
Mounted Police	2	2	145 00
Marine and Fisheries	14	8	881 00
Militia and Defence	25	12	1,510 00
Mines Department	1	0	50 00
Parliamentary Library	3	0	120 00
Privy Council	3	6	365 00
Post Office Department	9	4	505 00
Public Works Department (including Ottawa River Works)	31	16	1,936 00
Printing and Stationery	5	2	300 00
Railways and Canals	7	5	520 00
Royal Mint	1	0	35 00
Secretary of State	2	4	238 00
Senate	6	0	225 00
Trade and Commerce	3	4	255 00
	224	113	13,651 25

APPENDED TABLES.

The usual tabular statements of the lines and offices, staff, &c., of the telegraph service, following hereupon, will be found to contain whatever additions or changes have been made up to March 31, 1908.

D. H. KEELEY,

OTTAWA, November 30, 1908.

GOVERNMENT TELEGRAPH SERVICE.

NEWFOUNDLAND TELEGRAPH SERVICE.

No.	Stations.	Intermediate Distance	Agents and Operators.	Memo.
		Miles.	$ cts.	
1	Port au Basque	0	50 00 or commission.	N.B.—The commission is 25 per cent upon all business to and from the office; said commission guaranteed not to be less than at the rate of $50 per annum.
2	Cape Ray Lighthouse	14	50 00 "	
	Totals	14	100 00	

N.B.—The above short line is constructed in connection with the Signal Service, and connects at Port au Basque with the land line system of the Anglo-American Telegraph Company.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

ANTICOSTI TELEGRAPH SYSTEM.

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
1	Fox Bay	0	Geo. Cabot	300 00	May 13, 1900	Increased from $200 since December, 1902.
2	Heath Point	23	C. Hubert	50 00 or commission. 200 00 per annum	Aug. 1, 1900 Sept. 1, 1907	For local agency. For cable repeating station.
3	South Point Lighthouse	32½	E. Leprise	50 00 or commission.	July 1, 1903.	
4	Shallop Creek	17½	B. Bradley	240 00 per annum.	" 7, 1881	
5	Salt Lake	52½	Jos. Bourget, rep. Mrs. Bourget, opr.	360 00 " " 50 00 " "	" 17, 1906 " "	Plus $1 per day when on duty as general repairer.
6	Southwest Pt. Lighthouse	15	A. Z. Lemieux	420 00 " "	" 1, 1901	Increase from $300 since May, 1903.
....	Jupiter River	7		50 00 or commission.		
....	Otter River	17½		50 00 "		
....	Bescie River	22		50 00 "		
....	Cape Eagle (Ellis Bay)	10	Jas. Duguay	50 00 "	June 20, 1906	
7	West Point Lighthouse	9	A. Malouin, dist. supt. " " opr. Liz. " substitute, opr.	344 00 per annum 480 00 " 50 00 "	Aug. 1, 1900 " 10, 1881	Temporary.
8	English Bay	3	F. Cabot	300 00 "	July 1, 1882	
....	Mechastic Bay (cable landing)	14½				
	Totals	223½		3,044 00		

Southwest Point connects with L'Anse à Fougère, Gaspé, by cable 44¼ knots; and from Mechastic Bay connection is made with Long Point of Mingan by cable 21 knots.

0	L'Anse à Fougère		Thos. Dupuis	17 00		Special allowance for the cable terminus. A testing station only*.
1	Gaspé Basin	28	J. J. Annett	540 00	Oct. 16, 1881	Transfer office. Connection with G. N. W. telegraph system. The salary was $420 per year previous to December 1, 1903.
		28		557 00		

* This payment was made to Mr. N. Bernier prior to October, 1903.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

MAGDALEN ISLANDS SYSTEM.

Magdalen Islands Section.

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
1	Amherst	0	Miss J. Shea	50 00 or commission	Oct. 1, 1882	The commission is 25 per cent on all business to and from the office in each instance; said commission guaranteed to be not less than at the rate of $50 per annum.
2	Amherst Lighthouse	9	Wm. Cormier	50 00 "	June 11, 1881	
3	Etang du Nord village	15	I.G.Binet, gen.repairer	400 00 "	Dec. 1, 1900	Plus $1 per day when absent on duty.
			Mrs. A. Binet	50 00 "	" 1, 1881	
4	Etang du Nord Lighthouse	1	N. Arseneault	50 00 "	Sept. 1, 1891	Two wire loop line.
5	Grindstone Island	5	W. Leslie	Commission 25 p.c	May 20, 1897	
6	Grindstone West	....	A.LeBourdais, dis.supt	720 00	Aug. 17, 1880	Plus $1 per day when absent on duty. The salary was $600 per annum prior to May 1, 1904.
			Mrs. LeBourdais, oper.	50 00	Sept. 15, 1893	
			J. J. LeBourdais	37 00 per month	May 25, 1904	Temporary assistant.
7	House Harbour ($\frac{1}{2}$ knot cable)*	3	Camille Delaney	50 00 or commission	June 1, 1903	
8	Wolfe Island	28½				
9	Grosse Isle	11	N. Clark	360 00 or commission	June 1, 1888	For repeating station. Prior to Dec. 1, '02, the allowance was $200 and commission for local agency.
			J. Quinn	50 00 "	Dec. 1, 1902	
10	Grand Entry	11	Mrs. F. Atkins	50 00 "	Feb. 18, 1882	
11	*Point Basse—2 wire loop from House Harbour	4	H. Arseneau	50 00 "	Aug. 1, 1902	
12	South Beach 2 wire loop	3	F. Chevrier	50 00 "	July 1, 1905	
13	Bryon Island	1	W. Dingwell	150 00 "	Jan. 1, 1903	Two-wire loop line from terminal hut for Grosse Isle and Anticosti cables.
		91½		2,130 00		

Grosse Isle connects at Old Harry with Meat Cove, C.B., by cable 55 knots; and connects with Bryon Island by cable 11 knots; thence to Heath Point, Anticosti, 93 knots.

CAPE BRETON SECTION.

1	Meat Cove	0	Mrs. H. L. McEachern	50 00 or commission	Sept. 1, 1907.	Closed August 31, 1906, and reopened June 18, 1907.
2	Bay St. Lawrence including connections to cables	14	V. Therriault	720 00	May 1, 1902.	Cable station at Bay St. Lawrence in place of Meat Cove since September 1, 1906. The commission is 25 p.c. on all business to and from the office in each instance; said commission guaranteed to be not less than at the rate of $50 per annum.
3	Aspy Bay	5	L. Y. Nichols.	50 00 or commission	July 1, 1894.	
4	Dingwell (loop line)	3¾ / 2¾	Joe O'Brien.	50 00 "	Nov. 1, 1907.	The loop line formerly running to White Point has been withdrawn.
5	Cape North (Inland)	3	N. A. McDonald	50 00 "	May 13, 1904.	
6	Neil's Harbour (half-way house loop line)	11 / 1¾	M. McLeod	50 00 "	April 1, 1887.	
7	Ingonish North Bay	9	Mrs. S. S. Burke	50 00 "	June 1, 1884.	Former Agent J. M. Burke deceased.
8	South Ingonish	10½	Geo. Brewer	50 00 "	May 7, 1899.	
9	Ingonish Ferry	2	Anna McLeod	50 00 "	Oct. 1, 1903.	
10	French River ¼ knot cable	21	John McDonald	50 00 "	April 1, 1899.	
11	Indian Brook	5	Sadie McDonald	50 00 "	Feb. 1, 1907.	
12	Murray (loop line)	14 / 10	K. B. Matheson.	50 00 "	Jan. 29, 1902.	
13	Englishtown ¼ knot cable	7	W. Bingham	120 00 and commiss., and 25 p.c. R. & Cks	July 19, 1882.	Switching point for Baddeck line.
14	South Gut, St. Ann's (on loop)	5	Rachael Morrison	50 00 or commission	Sept. 1, 1904.	Closed December 31, 1899.
15	Baddeck (on loop)	13	L. M. Anderson	100 00 and 25 p.c. R. & Cks	June 17, 1904.	Salary.—$120 per year previous to this appointment. Former Agent Mr. A. Anderson.
	Englishtown (back on loop)	18				This loop to Baddeck starts from and returns to Englishtown.
16	Kelley's Cove, N. Campbellton	6	J. S. Burchell.	50 00 or commission	July 7, 1904.	
17	Big Bras d'Or ¼ knot cable	2½	D. Livingston	100 00	Jan. 1, 1889.	Increase from $50 to $100 since November 1, 1904.
18	North Sydney	12½	W. U. Tel. Co	Commis'n only		The commission is 50 p.c. on local business and 25 p.c. on through messages: and covers supervision of line and office accommodation at North Sydney.
	Repairers Sections.					
	Meat Cove—Sugar Loaf		M. McAskill	80 00	April 1, 1898.	
	Sugar Loaf—Ingonish		Charles Smith	100 00	" 1, 1898.	Increase from $80 since June 1, 1903.
	Ingonish—Englishtown		R. A. McDonald	100 00	" 1, 1898.	
	Englishtown—Baddeck		D. McAulay	60 00	Nov. 1, 1904.	
	" North Sydney		Dan Campbell	100 00	July 14, 1903.	
	Murray—Indian Brook		John Smith	25 00	June 17, 1902.	
	Ingonish		S. S. Burke, gen. repr.	420 00	April 1, 1904.	Payment includes horse-hire.
		176¾		$2,575 00		

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

MABOU-CHETICAMP AND MEAT COVE, C.B., TELEGRAPH SYSTEM.

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
1	Mabou	0	Mrs. M. McDonald	120 00 per annum	April 1, 1887.	
2	Strathlorne	9	Rosela McLean	50 00 or commission		Office closed January 13, 1907.
3	Inverness Town (Broad Cove)	11	Helen McLean	all rec'ts & cks.		Acting manager since March 18, 1907.
4	Southwest Margaree	12	D. D. McFarlane	50 00 per annum		The commission is 25 p.c. of the Government line tolls, and is guaranteed to amount to not less than $50 per annum. Where 50 p.c. commission is paid there is no guarantee as to amount.
5	Margaree Harbour	5	A. B. C. McLean	50 p.c. R. & Cks.		
6	Northeast Margaree (loop line wire)	10	Mrs. J. D. Ross	50 00 or commission	Feb. 1, 1898.	
7	Grand Etang	8	G. Doucet	50 00 "	Sept. 13, 1902.	Closed March 31, 1905.
8	Cheticamp	8	Chas. J. An Coin	50 00 "	Aug. 3, 1905.	
9	Pleasant Bay	27	Mrs. G. P. McIntosh	50 00 "	Sept. 1, 1907.	
10	Cape St. Lawrence	15	Mrs. C. Jamieson	50 00 "	Jan. 1, 1904.	
	Meat Cove	4	See Meat Cove Line / D. C. Dawson, d. supt.	720 00 "	" 1, 1887.	Salary increased at $60 per month, July 1, 1907.
	Repairers Sections.					
	Mabou—Strathlorne		A. G. McDougall	40 00 per annum	Nov. 3, 1902.	
	Strathlorne—S. W. Margaree		J. D. McFarlane	40 00 "	June 4, 1902.	
	S. W. Margaree—Margaree Harbour		Alex. McFarlane, sr.	40 00 "	" 4, 1902.	
	Margaree Harbour—Grand Etang		H. K. McLean	25 00 "	" 1, 1905.	
	Cheticamp		Joseph L. Chaisson	40 00 "	" 1, 1905.	
	Cheticamp—Barren		J. G. Chaisson	40 00 "	July 1, 1905.	
	Barren—Pleasant Bay		J. A. McLean	10 00 "	" 20, 1903.	
	Pleasant Bay—Polits Cove		K. Fraser	10 00 "	" 20, 1903.	
	Polits Cove—Halfway Shanty		E. Fraser	30 00 "	" 20, 1903.	
	Halfway Shanty—Meat Cove		R. Fraser	40 00 "	" 20, 1903.	
	General lineman		V. A. McLellan	420 00 "	Mar. 1, 1905.	Salary covers horse-hire, &c.
	Totals	109		1,415 50		

	Boularderie.						
	North Sydney.	See Cove	Meat Line				
1	Little Bras d'Or (M.C. poles)		5	Miss D. Edna Grantmyer	$50 00 or commission	Dec. 1, 1906	The commission is 25 p. c. of the Govt. line tolls in each instance and is guaranteed to amount to not less than $50 per annum.
2	Alder Point (loop line)		5	Mrs. John Arsenault	50 00 "	" 1, 1906	
3	Groves Point (1 mi. M. C. poles)		3	Mrs. Mary Dunlop	50 00 "	" 1, 1906	
4	Hillside		4	Mrs. Christina McKenzie	50 00 "	Feb. 1, 1907	
5	Boularderie West		4	John McIntyre	50 00 "	Jan. 1, 1907	
6	S. S. Boularderie		3	Donald McRae	50 00 "	" 1, 1907	
7	Point Clear		4	Mrs. M. McLeod	50 00 "	Dec. 1, 1906	
8	Upper Kempt Head		7	Mrs. Murdock McKenzie	50 00 "	Oct. 6, 1904	
9	Ross Ferry		6½	Robert Campbell	50 00 "	" 6, 1904	
10	Boularderie Centre		6	Mrs. J. B. McKenzie	50 00 "	" 6, 1904	
	Big Bras d'Or		7½	See Meat Cove Line			
			55				
	Eskasoni.						
	North Sydney						
1	French Vale		11	John J. McLean	50 00 "	March 25, 1907	
2	Gillis Lake		5	Daniel H. Gillis	50 00 "	Feb. 28, 1907	
3	East Bay		4	Miss M. L. McNeil	50 00 "		
4	North Side East Bay		6	James J. Gillis	50 00 "	Jan. 15, 1907	
	Eskasoni		5	Sadie McMillan	50 00 "	Dec. 6, 1907	
5	Castle Bay		6	Miss Maria McDonald	50 00 "	Jan. 10, 1907	
			37				
	Repairers Sections.						
	Alder Point—Little Bras d'Or			Captain John Arsenault	50 00		
	Big Bras d'Or—Upper Kempt Head			J. A. C. McKenzie	50 00		
	Little Bras d'Or—Upper Kempt Head			R. R. McKenzie	50 00		Appointments date from June 1, 1907.
	North Sydney—Gillis Lake			Angus J. McLean	50 00		
	Gillis Lake—Eskasoni			Duncan Gillis	50 00		
	General repairer			Joseph Logue	540 00		Salary increased from $420 to $540 per annum March 1, 1907.
			92		1,540 00		

Meat Cove station connects with the Magdalen Islands system by a cable to Old Harry Head, 55 knots, and with St. Paul's Island by a cable of 20 knots. The latter is operated with telephones.

1	St. Paul's Island	3	S. C. Campbell	50 00	Oct. 1, 1890	Land wire across the Island, Atlantic Cove to Trinity Cove.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

NORTH SYDNEY—MEAT COVE AND PORT HAWKESBURY SECTION.

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
	Mabou	0				(See Mabou—Meat Cove section.)
1	Port Hood	10	D. J. McDonald	50 00*	July 1, 1903	
2	Judique	10	E. McDonald	50 00		
3	Craignish (Craigmore)	8	Allan Cameron	50 00	" 1, 1903	
4	Port Hastings	10	Miss M. McFarlane	50 00	" 1, 1903	
5	Port Hawkesbury	3¾	Miss E. McDonald	120 00	" 1, 1903	
6	River Bourgeois	26	M. E. Boyd	50 00	" 1, 1903	
7	St. Peter's	6	R. C. Morrison	100 00		Main battery at St. Peters.
8	Lower Lardoise (½ mile loop)	7¼	Miss Mary M. Finlayson	50 00	June 22, 1905	
9	Grand River	26	Miss E. A. Finlayson	50 00	" 1, 1903	
10	St. Esprit (Laframboise Intervale)		Mrs. J. D. Morrison	50 00	Sept. 1, 1906	
11	Fourchu (Fourchie)		Miss Ida F. Cann	50 00		
12	Gabarous (3 mile loop)	16	Miss C. Grant	360 00	Jan. 16, 1904	Repeating office. Increase subject to approval.
13	Louisbourg	14	Wesley Townsend	50 00	Feb. 1, 1904	
14	Main à Dieu	13	Miss Mary Dickson	50 00	June 1, 1904	$50 additional to Main à Dieu agency for care of main battery.
	To cable landing	1				
	Cable across channel	1¾				
15	Scatarie Island (Western Light)		E. E. Pope	50 00	Aug. 15, 1904	
16	" (Eastern Light)	7¼	J. T. Martel	50 00	" 1, 1904	
	Repairers Sections.					
	Mabou and Judique		J. A. Campbell	50 00		
	Judique and Port Hawkesbury		J. N. McIsaac	50 00	Aug. 1, 1904	(See Mabou—Meat Cove section.)
	Port Hawkesbury-Gabarous		G. E. Bisset, genl. repr.	420 00		
	Gabarous	35½	No appointments, only the terminal offices in operation.			This line was opened for business Dec. 11, 1903.
	Junction (wire only 3 miles)					
	Marion Bridge					
	Perry Lewis					
	Leitche's Creek					
	North Sydney-Scatarie		E. M. Dickson	540 00	Aug. 1, 1907	
	Totals	202½		1,750 00		

* Or commission. The commission is 25 per cent of the Government line tolls, guaranteed at rate of $50 per annum.
North Sydney transfer office, connection with W. U. Telegraph system.

NOVA SCOTIA TELEGRAPH SYSTEM.

Cape Sable Section.

1	Barrington	0					This line has been leased to the Barrington Telephone Company from August 12, 1897. The lease is terminable at any time.
2	Newelton (including 1½ knots cable)	11					
3	Cape Sable Island lighthouse (including ¼ mile cable)	6¾					
	Totals	17¾					

East Coast Section.

N.B.—In connection with the Signal Service a land line, 208 miles in length, was erected in 1881, between Canso and Halifax, for a bonus of $16,000, and is maintained and operated by the Western Union Telegraph Company, without further cost to the Government.

BAY OF FUNDY, N.B., TELEGRAPH SYSTEM.

Grand Manan Section.

	Long Eddy Cable Hut to.						
	Flagg's Cove	3	Mrs. C. C. Seely (d.su.)	540 00	Nov.	18, 1880	*The commission is 25 p.c. on all business to and from the office in each instance; and commission guaranteed not to be less than at the rate of $50 per annum. When 50 p.c. commission is paid there is no guarantee as to amount.
1	"		Miss V. A. McFarlane	50 00 or commission	Oct.	1, 1903	
	"		A. Gilmour, repairer	60 00	Dec.	1, 1894	
2	Castalia	2½	G. E. Dalzell	Commission 25 p.c.	June	1, 1898	
3	Woodward's Cove	3½	W. A. Fraser	" 50 p.c.	Feb.	28, 1893	
4	Grand Harbour	2	J. L. Newton	75 00 or commission	April	1, 1887	$25 per annum is included for repeating Whitehead branch.
5	Seal Cove	4½	J. A. Ingersoll	50 00 "	Sept.	22, 1899	
6	Southern Head Lighthouse	5¼	O. McLaughlin	Commission 25 p.c.	April	22, 1897	Southern head office is now operated by telephone from Seal Cove.
	Branch Line.						
	Grand Harbour	0					
7	Chency's Island (½ knot cable)	4¾	S. E. Russell	" 25 p.c.	Feb.	1, 1891	
8	Whitehead Island (¾ knot cable)	1½	Mrs. W. Cassaboom	50 00 or commission	"	1, 1903	
	Cable, Long Eddy to Liberty Cove	7¼					
	Liberty Cove Cable Hut to.						
9	Welchpool	7½	Wellington Parker, lineman	2 00 per day			Employed occasionally.
			G. E. Mitchell	210 00 and commission	May	1, 1905	
	Cable across channel	1¾					
10	Eastport, Maine, U.S.A.	½	J. Cushing	200 00	Dec.	26, 1881	
	Totals	44¼		1,035 00			

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

CHATHAM-ESCUMINAC, N. B., TELEGRAPH SYSTEM.

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
1	Chatham	0	Great Northwestern Telegraph Co.	185 00		This amount is paid for supervision of the line and office accommodation at Chatham.
2	Black Brook	5½	M. McDougall	50 00 or commission	July 1, 1904	The commission is 25 p. c. of the Government line tariff receipts in each instance, and is guaranteed to amount to not less than $50 per annum.
3	Baie du Vin	15	M. A. Williston	50 00 "		
4	Lower Hardwicke	6	Mrs. M. Brimmer	50 00 "	Aug. 1, 1891	
5	Escuminac	3¾	D. Lewis	50 00 "	Sept. 1, 1885	
6	Point Escuminac lighthouse	12	K. R. McLennan	50 00 "	Nov. 1, 1893	$12 per annum allowed for care of main battery at Point Escuminac.
	Totals	42¼		435 00		

GROSSE ISLE QUARANTINE TELEGRAPH SYSTEM.

	Quebec	0	Great Northwestern Telegraph Co.	185 00		This amount is paid for supervision of the line, and covers rent of pole line from Quebec to L'Ange Gardien, for which $35 per annum is charged.
	L'Ange Gardien	13				
	Orleans Island (cable)	¾				
2	St. Pierre	4½	Marie Turcotte	50 00 or commission	Mar. 1, 1885	This commission is 25 p. c. of the Government line tariff in each instance, and guaranteed to amount to not less than $50 per annum.
3	Ste. Petronille	3½	Desneiges Plante	50 00 "	Oct. 1, 1896	
4	St. Laurent	6½	M. Gobeil	120 00 and 25 per cent commission	Sept. 15, 1888	
5	St. Jean	7	P. Pouliot	1,120 00 and 25 per cent commission	Nov. 1, 1907	For local agency. Dist. Sup. and repairer.
6	St. François	6¾	Helene Lemelin	50 00 or commission	Oct. 1, 1907	
7	Isle Réaux (including 2 knots cable)	3¼				
	Isle Réaux (land line)	2½				
8	Grosse Isle quarantine office (including 2 knots cable)	3½	Miss Julia Legacé	100 00 and 25 per cent commission	June 1, 1906	$4 per month for messenger serv. in summer, and $12 p. annum allowed for care of main batt. at Gr. Isle.
	Quarantine telephone system 2 wire line	1¾				NOTE.—The telephone system on Grosse Isle since May, 1893, has comprised 1¾ miles of 2 wire line with 11 connections or stations.
	Totals	52¾		1,155 00		

	Loop Line (2 wires.)							
	St. Francois—St. Francois-Nord	5	Mde. Irénè Labbé	50 00	or commission	July	1, 1907	
	St. Jean-Ste. Famille	5½	P. Létourneau	50 00	or commission	April	2, 1904	

CHICOUTIMI AND NORTH SHORE OF ST. LAWRENCE TELEGRAPH SYSTEM.

Chicoutimi Section.

1	Bay St. Paul	.....	F. Boivin	360 00	per annum †	Previous to April	1, 1885	*The commission on business is 25 per cent of the Government tolls of the line; the amount guaranteed to be not less than $50 per annum.
				25 p.c.	commission			
2	St. Urbain	9	A. Boivin	50 00	or commissi'n*			
			Michel Fortin, rep'rer	270 00	per annum	"	1, 1885	
3	La Galette	37	S. Ouellette	150 00	or commission	Aug.	25, 1902	Salary increased at $150 per annum, June 1, 1907.
4	Ferland	27½	B. Lavoie	50 00	"	Mar.	1, 1905	Plus $25 per year for operating branch line to L'Anse St. Jean.
5	St. Alexis	10	Mrs. D. Simard	50 00	"	Nov.	1, 1899	
6	St. Alphonse de Bagotville	3	Mrs. C. Levesque	150 00	per annum	June	1, 1906	J. Fortin's division includes the branch line to L'Anse St. Jean.
7	Chicoutimi	11½						
		98		1,110 00				†Salary increased at $360 per annum, June 1, 1907.
	Branch Line.							
	St. Alexis	0	Mrs. D. Simard	75 00				
8	St. Felix d'Otis	10	P. V. Lavoie	50 00		Nov.	1, 1905	
9	L'Anse St. Jean	30	Eris Degagné rep'rer	272 00		Nov.	1, 1907	
			R. Martel	50 00		Jan.	1, 1904	
10	Petite Saguenay	8	M. Tremblay	50 00		Sept.	1, 1903	
11	Anse Cheval	6	Jos. Degagné	50 00		Feb.	1, 1905	(This office had been closed since April 30, 1904.)
12	St. Etienne	7						
	St. Catherine Bay	17	G. Boulienne (see North Shore W. B. Line)					
		78		485 00				
	Totals	176		1,595 00				

Murray Bay-St. Agnes Section.

1	*Murray Bay*	0	Mrs. F. Vincent					(See Murray Bay, Bersimis section.)
2	St. Agnes	7½	Jos. Gaudreau	50 00		Jan.	1, 1904	
	Trinity (Guay)	7	Jos. Demeules	50 00		May	1, 1906	
		14½		100 00				
1	Bay St. Paul	0	F. Boivin					(See Bay St. Paul. Chicoutimi section.)
	Petite River	13	Ls. Bouchard	50 00				Payment at Bay St. Paul $25 per year and $12 for battery care, for operation of this branch to Petite River.
		13		50 00				

Connections for these lines with the G. N. W. Telegraph System are made at Chicoutimi, Bay St. Paul and Murray Bay.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

CHICOUTIMI AND NORTH OF ST. LAWRENCE TELEGRAPH SYSTEM—*Continued.*

CHICOUTIMI SECTION—*Continued.*

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
1	Tadousac	0	Eugene Caron	Commission.		
2	Sacré Cœur	12½	H. Gravel, repairer Miss L. Maltais	360 00 50 00		
3	Ste. Marguerite	8	Mrs. P. Hervieux	50 00		
4	Price Bros. & Co	2	Company	Accommodation.		
5	Descente des Femmes	34	Aug. Villeneuve	50 00		
6	Lac Laurent	9	S. Gagnon	50 00		
7	Ste. Fulgence	8	G. H. Gagnon	50 00		
8	Ste. Anne	8	P. Gauthier, repairer	See below.		
9	Chicoutimi	1	D. Villeneuve	"		
1	St. Anne	8	P. Gauthier, repairer	300 00	Aug. 1, 1903	Salary increased at $300 per annum April 1, 1907.
2	Shipshaw	3	Miss M. Dufour	50 00	Nov. 1, 1907	
3	Shipshaw, North	6	J. Murdock	50 00	" 1, 1903	
4	St. Leonard	7	Geo. Gagnon	50 00	Sept. 1, 1903	
5	St. Ambroise	10	A. Simard	50 00	June 1, 1905	
6	St. Charles	0	B. Bouchard	50 00	Sept. 1, 1903	
7	Taché	7	Jean Fradette	50 00	Jan. 1, 1908	
8	St. Joseph d'Alma	3	Elie Gagné	50 00	" 1, 1908	
9	St. Cœur de Marie	5	Alfred Rousseau	50 00	" 1, 1908	
10	St. Henri de Taillon	6½	...	...	...	
11	Honfleur	8	...	...	...	
12	La Pipe	0	Hypolithe Boivin	50 00	Jan. 1, 1908	
	Chicoutimi	3	J. C. Taché, Dis. Supt. D. Villeneuve, operat'r J. Lapointe, " A. Simard, inspector T. Villeneuve, night op. J. A. Conet, clerk A. Gagné, messenger J. Fortin, repairer	300 00 600 00 360 00 564 00 360 00 180 00 120 00 420 00	" 1, 1905 April 1, 1906 April 1, 1906 April 1, 1906 June 1, 1897	
	Branch Line.	37		3,664 00		
	St. Anne	0	P. Gauthier	...	...	(See St. Charles—Chicoutimi section).
1	Ste. Fulgence	9	Rev. Geo. Gagnon	50 00	Jan. 1, 1904	
		0	John Brisson	360 00		
		9		410 00		

	St. Anne	0	P. Gauthier	50 00	Feb. 1, 1904	
1	Range 9	3	Thos. Simard	50 00	Nov. 1, 1905	
2	Lac Charles	3	A. Dufour	50 00	" 1, 1904	
3	Lac Clair	9	L. Boulianne	50 00	" 1, 1905	
		15		200 00		

North Shore (West of Bersimis).

1	Murray Bay	0	Mrs. F. Vincent	50 00 or commission	Previous to April 1, 1885	Plus $25 per year, and $12 for battery care for operation of branch to Guay.
2	Cap à l'Aigle	4	Miss S. Bergeron	50 00 "	June 1, 1905	
3	St. Fidèle	6	Jos. Desbiens	50 00 "	Dec. 1, 1904	
4	Port au Persil	7	A. Brassard	50 00 "	May 1, 1889	
			A. Brassard, repairer	210 00 "	June 1, 1887	
5	St. Siméon	4	Aimé Belley	50 00 "	Aug. 1, 1907	
6	Baie des Rochers	12	Mde D. G. Savard	50 00 "		
7	St. Catherines Bay Br. L.	17	G. Boulianne	100 00 "	Nov. —, 1886	
8	St. Etienne Br. L.		Mde G. Boulianne	210 00 "		
9	Tadousac (1½ knot cable)	13	J. E. Caron	50 00 "	Nov. 1, 1888	
10	Sacré Cœur Br. from Tadousac.	12½	L. Maltais	50 00 "	Dec. 6, 1901	
11	Bon Désir	10	Mde E. Gauthier	50 00 "	Aug 1, 1904	
12	Bergeronnes	5	Mde M. Savard	50 00 "	April —, 1885	
13	Escoumains	12	J. H. Topping	50 00 "	" —, 1885	
14	Baie des Bacons	8	P. Bouchard		May 6, 1902	Commission at 25 per cent, without guarantee at Baie des Bacons.
15	Sault au Mouton		Léonce Boucher	50 00 or commission	Nov. 1. 1906	
16	Mille Vaches	8	Mde L. Piuzé	50 00 "	Aug. 1, 1907	
17	Anse Hamilton	11½	C. P. Easton		Sept. 1, 1903	Accommodation office.
18	Portneuf, light	6	Léandre Bouchard	50 00 or commission		
			E. Courbron, repairer	420 00	April 1, 1888	
19	Sault au Cochon	7		50 00 or commission		Sault au Cochon closed September 30, 1896.
20	Bersimis	31	A. Maloney, agent	500 00	Sept. 21, 1896	
			E. Pope, dist. supt.	600 00	April —, 1885	
	*Totals	174		2,920 00		

*Note.—In the estimates, the maintenance of the Chicoutimi and North Shore line is provided under head of North Shore Line. They are operated conjointly.

North Shore (East of Bersimis).

1	P'te aux Outardes	28	H. Tremblay	50 00 or commission	Dec. 1, 1896	
	Manicouagan	32	Mde J. Maltais	50 00 "	Nov. 1, 1907	The repeating office formerly at Manicouagan was removed to Bersimis in September, 1896.
2	Mistassini	22		50 00 "		
3	River Godbout	26	N. A. Comeau	50 00 "	Oct. 15, 1885	
4	Pointe des Monts	18½	L. F. Fatfard	50 00 "	Dec. 28, 1883	
5	Trinity Bay West	5½	Jos. Poulin	50 00 "		
6	Trinity Bay East	2½	A. Bilodeau	25 p.c. or commission	May 1, 1889	
7	Caribou Islands	7	I. Comeau	" "	Sept. 1, 1889	

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

CHICOUTIMI AND NORTH OF ST. LAWRENCE TELEGRAPH SYSTEM—*Continued.*

NORTH SHORE (East of Bersimis).—*Continued.*

No.	Stations.	Inter. mediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
8	Pointe aux Anglais	10¾	Paul Côte	Accommodation office	Jan. 10, 1895	No commission is paid at this office.
9	Pentecost	6½	P. Molloy	250 00 per annum	Sept. 17, 1905	
10	Ste. Marguerite	47½	A. Therriault	180 00 per annum	July 1, 1888	
11	Clark City	5	Accommodation office	25 p. c. commission	April 17, 1903	
12	Seven Islands	17¾	P. E. Vignault	180 00 per annum	Jan. 2, 1884	
			F. Gallienne, repr.	540 00 "	Nov. 5, 1906	Plus 50 cents per day when absent on duty.
13	River Moisie	15½	J. Poirier	50 00 or commission	June 1, 1896	There is also an accommodation office in operation at Moisie in the fishing season.
14	Pigon	28	Mrs. Peter Wright, op	100 00 "	Oct. 1, 1902	
			Peter Wright, repr.	112 00 "	" 1, 1902	
15	Little River	29	Miss H. Leberge	50 00 "	" 10, 1900	
16	Sheldrake	15	Mrs. Alphonse Girard	50 00 "	Dec. 1, 1904	
17	Thunder River	6½	Mrs. H. Cody	50 00 "	Feb. 1, 1890	
18	Magpie	14	Geo. Poirier	50 00 "		
19	St. John River	9	B. Chambers	50 00 "	Oct. 1, 1889	
20	Long Point	10	E. H. Tetu, dist. supt	1,080 00 per annum	Nov. 1, 1891	Long Point is the repeating office for the Anticosti, cable in operation since September 1, 1891.
			Mrs. E. H. Tetu, opr.	300 00 "	" 1, 1903	
			A. Fournier, opr	500 00 "	Sept. 11, 1906	
21	Mingan	7	E. Maloney	100 00 or commission		Salary increased at $100 per annum, March 31, 1907.
22	Point Esquimaux	24	Mrs. D. C. Hould	240 00 per annum	Sept. 1, 1897	Allowance for office rent $4 per month.
			Edwd. Cyr, inspr.	500 00 "	Nov. 2, 1902	Plus 50 cents per day when absent on duty.
23	Betchouanes	20	Jos. Picard, op. & rep.	212 00 "	July 15, 1904	
24	Piastre Bay	23	S. Tanguay, repr.	112 00 "	Sept. 18, 1902	
			Mrs. J. Beetz, opr.	100 00 "	" 18, 1902	
25	Watichou	15	Mrs Cl. Bourque, opr	100 00 "	Dec. 1, 1903	This office was closed on withdrawal of former agent from Sept. 1, 1903, $12 rent to J. Beetz.
			John Bourque, repr.	100 00 "	" 1, 1903	
26	Aguanus	21¾	S. Galant, repr	112 00 "	Sept. 3, 1902	
			Mrs. Galant, opr.	100 00 "	" 3, 1902	
27	Natashquan	21	C. Vignault, repr.	112 00 "	" 5, 1902	
			Miss Vignault, opr.	100 00 "	" 5, 1905	
28	Kegaska	33	Geo. Anderson, repr.	112 00 "	" 16, 1902	
			Miss Anderson, opr.	100 00 "	" 16, 1902	
			J. L. Osborne, inspr.	500 00 "	" 1, 1902	Plus 50 cents per day when absent on duty.
29	Masquaro	18	Wm. Foreman, opr & rep	212 00 "	June 1, 1903	
30	Romaine	25	M. Blais, repr.	112 00 "	Sept. 17, 1902	
			Miss R. Blais, opr.	100 00 "	" 17, 1902	
31	Wolf Bay	24	R. Jones, repr.	150 00 "	Nov. 25, 1902	
			R. A. Guillemette	100 00 "		
32	Pointe au Maurier	24	J. Galibois, repr.	112 00 "	Sept. 19, 1902	
			Miss P. Galibois	100 00 "	" 19, 1902	

33	Harrington	20	J. Jones, repr. Mrs. Jones, opr.	112 00 per annum 100 00 "	Sept. 20, 1902 " 20, 1902	
34	Whale Head	17	Nap. Nadeau, rep. & opr.	212 00 "	Jan. 21, 1903	
35	Mutton Bay	20	Alf. Cormier, rep. & opr.	444 00 "	June 1, 1902	
36	Baie de Ha.	27	Mrs. J. Monger, opr. J. Monger, rep.	100 00 " 112 00 "	" 14 1904 " 14 1904	
37	St. Augustine	27	G. W. Burgess, rep. & opr	212 00 "	Sept. 25, 1902	
38	Chicatica Bay	24	Miss Esther Robin. George Robin	100 00 " 112 00 "		
39	Rocky Bay	30	Miss B. E. Chevalier, o. L. O. Chevalier, rep.	100 00 " 112 00 "	April 20, 1904 " 20, 1904	
40	Bonne Esperance	21	G. Chevalier, repr. Miss Chevalier, opr.	112 00 " 110 00 "	Oct. 2, 1902 " 2, 1902	
41	Brador Bay	29	Johnny Jones, opr. P. C. Vignault, insp.	100 00 " 500 00 "	June 13, 1903 Feb. 1, 1903	Plus 50 cents when absent on duty.
42	Blanc Sablon	6	Thos. Morel, rep. & opr.	212 00 "	Oct. 1, 1902	
43	Forteau Bay	13	A. Hart, repr. & opr.	212 00 "	July 19, 1902	
44	Pointe Amour	17	Thos. Whyatt, rep. & opr	112 00 "	Feb. 17, 1903	
45	West St. Modeste	16	Jas. Bolger, repr. & opr.	212 00 "	Oct. 5, 1902	
46	Red Bay	13	Geo. Moore, repr. Miss Moore, opr.	112 00 " 100 00 "	" 9, 1902 " 9, 1902	
47	Chateau Bay	30			Sept. 1, 1902 Dec. 1, 1902 Nov. 1, 1903	Closed Dec. 1, 1906.
48	Belle Isle	23¾	J. C. Colton, opr.	360 00 per annum	Sept. 14, 1902	
	Totals	916		10,896 00		

ONTARIO—PELEE ISLAND TELEGRAPH SERVICE.

1	Leamington	0	J. McR. Selkirk, d. supt	50 00 and commission 20 p.c.	Nov. 1, 1888	
2	Bairds	1½	Accommodation office		" 2, 1904	
3	Leamington Dock (Lake Shore)	1	E. M. Delaurier, accommodation office		" 1, 1895	
4	Tildens	7½	Accommodation office.		April 1, 1905	This is the connection that was formerly made with the club house nearby.
5	Point Pelee	2½	W. A. Grubb	Commission 25 p.c	Nov. 1, 1888	
	Leamington Dock to North Point Cable	17				The cable formerly 9½ knots from Point Pelee to the Island is now laid as here indicated 17 knots. The change was effected in August, 1901.
6	North Point Lighthouse	3	J. R. Ledwell	Commission 25 p.c	June 1, 1899	
7	North Dock	0	C. B. Quick	" "	Nov. 1, 1888	
8	Dr. Pirette	0	F. W. Pirette, M.D	Private instrument		Accommodation office formerly Dr. H. O. Van Epp
9	West Dock	5	A. M. McCormick	Commission 25 p.c	Nov. 9, 1888	
10	Srigley	3	James Srigley	" "	Oct. 25, 1907	
11	South Dock	2	R. E. McCormick	" "	Aug. 1, 1904	
	Totals	42½		50 00		

NOTE:—This line is operated by telephone.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

QU'APPELLE—ATHABASKA LANDING SECTION.

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		$ cts.		
1	Qu'Appelle	0	R. C. Macdonald, supt.	1,600 00	Oct. 1, 1905	Salary increased at $1,600, June 1, 1907.
			J.S.Macdonald,gen.ins	2,000 00	June 1, 1905	Resides at Kamloops.
			C. P. R. Tel. Co.	420 00	Dec. 1, 1906	The agent operator at Qu'Appelle is joint with the C. P. R.
			J. W. Wilson, lineman	600 00	Mar. 1, 1902	
2	Ft. Qu'Appelle	17	P. R. Elmer	720 00	Aug. 15, 1906	Salary increased at $720, Dec. 1, 1906.
3	Lipton	11	C. P. R. Tel. Co.	Commission 10 p. c.	May 1, 1906	Agent operator at Lipton, joint C.P.R.
4	Touchwood	29	J. Kelly		June 1, 1906	Agent operator paid by H. B. Co.
5	Kutawa	6	A. VonLindeburgh	720 00	Nov. 1, 1883	
6	South Humboldt	78	H. J. Macdonald	720 00	Feb. 1, 1904	
7	Saskatoon	69	C. P. R. Tel. Co	300 00	Jan. 1, 1892	
			G.T. Clement, lineman	600 00	Oct. 16, 1903	Agent operator joint with C. P. R. Can. Northern agent acts as agent on commission.
8	Warman	14	Can. Nor. Ry. Co.	Comm. 25 p. c. of receipts	Nov. 23, 1905	Operated on commission.
9	Henrietta	38	W. J. Salisbury	720 00	Oct. 1, 1886	
10	Battleford	47	J. D. Noel	720 00	" 1, 1900	
			Wm. Dewan	600 00	Mar. 1, 1907	G. Donovan resigned July 31, 1906.
11	Bresaylor	27	J. T. Gallahan	720 00	Dec. 1, 1900	
12	Lloydminster	70	H. McCleneghan	720 00	Nov. 1, 1907	
13	Onion Lake	50	A. Bowtell	720 00	Dec. 1, 1907	
14	Moose	33	G. G. Mann	720 00	Aug. 1, 1902	
15	St. Paul des Metis	32	C. Boulene	600 00	Nov. 1, 1906	J. A. Therien resigned Oct. 31, 1906.
16	Saddle Lake	13	J. W. Carroll	720 00	Sept. 1, 1900	Telephone Line from Saddle Lake to Industrial School 6½ miles
17	Victoria (Pakan)	37	R. Gordon	600 00	Feb. 1, 1905	
18	Andrew	10	B. Carey	600 00	Mar. 15, 1906	Telephone line from Andrew to Whitford, 6 miles.
			C. Norn, lineman	600 00	" 15, 1906	
19	Star	18	K. A. Morrison	600 00	Sept. 1, 1906	
20	Ft. Saskatchewan	25	A. W. M. Campbell	600 00	Oct. 1, 1898	
21	Edmonton	18	Geo. E. MacLeod	900 00	Nov. 6, 1906	
			G. Wilder, lineman	720 00	Sept. 1, 1907	W. McKay resigned Aug. 31, 1907.
22	Athabaska Landing	98	Jas. McKernan	600 00	Oct. 1, 1904	
		750		18,860 00		
	Telephone extension.					
23	Whitford	7	The Postmaster	Commission 25 p. c.	July 1, 1905	Connection is made with the telegraph office at Andrew.

Branch Lines.

	Edmonton					These branch lines are operated by the Edmonton District Telephone Co.
23	Winterburn	8				
24	Stoney Plain	5½				
25	Spruce Grove	8				
26	Stoney Plain Station	6½				
27	" Centre	3½				
28	St. Albert	9				
29	Raye	12				
30	Rivière qui Barre	8				
31	Alexandria	5				
		65½				

Wood Mountain Section.

1	Moose Jaw		C. P. R. Tel. Co	240 00	Dec. 1, 1891	The Agt. operator at Moose Jaw is joint with C.P.R.
			H. Sikes, batteryman	120 00	Dec. 1, 1893	
2	Wood Mountain	90	J. H. Thomson	600 00	Dec. 1, 1890	
			F. Brown, lineman	600 00	Nov. 1, 1905	
3	Willow Bunch	40	M. A. Noel	600 00	Oct. 19, 1904	
		130		2,160 00		

Duck Lake Section.

1	Batoche		D. H. Grant	120 00	Oct. 1, 1902	
2	Duck Lake	9	W. J. Learmouth	120 00	Dec. 1, 1907	A. H. Gordon resigned March 31, 1907.
		9		240 00		

Banff Telephone System.

	Local System in Banff National Park		H. Douglas (supt.)			This system is looked after by Mr. Douglas, superintendent of the National Park.
			J. H. Grierson (lineman)	25 00		
				25 00		

Totals—Number of offices, 36.
Mileage, 958.
Employees, 35.
Salaries per annum, $19,225.00.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

LINES IN BRITISH COLUMBIA.

No.	Stations.	Intermediate Distance.	Agents, &c.	Positions.	Salaries per Annum.	Date of Appointment.	Memo.
	Kamloops—Lower Nicola. Telephone Line.	Miles.	(See note in margin).....	.....	$ cts.	....	NOTE.—This line is operated under the superintendence of the resident architect at Victoria. For conversations 25c. for 5 minutes, half that rate for each additional 5 minutes or fraction thereof.
1	Kamloops	0	C. S. Stevens..	Dist. Sup.	* 1,200 00	June 1, 1904..	
			Miss B. McKnight.....	Clk & Ag.	420 00	July, 1901....	NOTE.—The lessees pay a monthly rent for the connections, and are allowed 25 per cent commission on local tolls for messages and conversations of non-subscribers.
2	Anderson Creek.....	12	W. McLeod....	Agent. ..	... .	" 1901....	
3	Nicola.....	.....	Mrs. M. V. Munro..	Exc. oper.	480 00	" 1901. ..	
4	Stumps Lake.....	13	Thos. Bunman.....	" .	....	" 1901 ...	
5	Beaver Ranch	.....	J. W. Moor	" .	....	" 1901....	
6	Quelchena.....	20	E. O'Rourke.	" .	.....	May, 1900....	Three additional connections in July, 1901.
7	Nicola Lake...	9	A. E. Howse	" .	.....	" 1900...	Add at Nicola Lake, July 1, or Government office, Dr. Sutton, A. R. Carrington.
8	Coutlee	... ...	Blair & Co.....	" .	... .	July, 1901....	
9	Lower Nicola.....	13	G. Armstrong..... ...	" .	.....	May, 1900....	
10	Aspen Grove	21		" .			
11	Otter Valley	2		" .			
12	Princeton....	26	A. E. Howse & Co.....	... .	180 00	Feb. 1, 1905..	
13	Hedley	25	John Love..	Exc. oper.	480 00	" 1, 1905..	See note in body of report.
14	Keremeos..	20		" .			
15	Fairview	12		" .			
16	Penticton.....	37	J. A. Schubert..... .	" .	120 00	" 1, 1905..	
	Totals	235					

* Increased to $1,200, March 1, 1907.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

BRITISH COLUMBIA—*Continued.*

No.	Stations.	Intermediate Distance.	Agents, &c.	Positions.	Salaries per Annum.	Date of Appointment.	Memo.
	Vernon-Kilowna Line.	Miles.			$ cts.		This line is operated both as a telephone and telegraph line.
1	Vernon	0	Miss G. E. Seaton	Agent and operator..	360 00	Mar. 1, 1905	Joint agent with C. P. Telegraph.
			A. S. Muir	Telephone agent	Commiss.	" 1, 1905	The commission is 25 per cent of the Government line tolls.
2	Kilowna	35	H. H. Miller & Co	Agts tel. and telegr..	720 00	" 1, 1905	
			A. L. Weeks	Lineman	720 00	Aug. 1, 1905	
	Totals	35			1,800 00		

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

BRITISH COLUMBIA—*Continued.*

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
	Victoria—Cape Beale.	Miles.		$ cts.		
			(See note in margin).....	.....	.....	NOTE—The superintendence of this line has been in the hands of the resident architect at Victoria since October, 1901, when the arrangement theretofore in operation with the C. P. Ry. Co. was terminated.
1	Victoria.....	0	E. Houghton, oper. (C.P. Tel.).	200 00	Nov. 1, 1891	Proportion of salary.
	Sooke.....	18	Percy Clark, line repairer.....	540 00	Dec. 1, 1903	
2	*Otter Point.....	8	E. Gordon, agent and operator.	720 00	" 1, 1891	Allowance of $7.50 horse hire when necessary to come to Victoria repairing line.
3	*Jordan River (Shirley)..	10	E. Clark	540 00	" 1, 1903	During winter months only.
4	Port San Juan (Port Renfrew).	30	E. C. Williams.....	240 00	Sept. 22, 1903	
			J. W. Williams, repairer ...	520 00	May 1, 1905	
5	Carmanah Lighthouse..... (Clo-oose 2 miles west.....)	24	W. P. Daykin, repairer.....	240 00	Nov. 1, 1891	
			D. Logan, repairer.....	540 00	April 1, 1898	
			R. S. Daykin, repairer.	540 00	June 1, 1905	
6	Cape Beale.....	28	M. Patterson, agent & operator	120 00	Sept. 1, 1899	
	Totals...	118		3,660 00		

* Telephone connections for the convenience of several firms in the neighbourhood have been established at *Jordan River* for Messrs. Bell, Irving & Co., Point-no-Point; The B. C. Packer's Asso., Point-no-Point and Jordan River; Capital City Canning Co., French's Ranch; J. H. Todd & Co., Coal Creek; 5 connections, rent paid $12 each for a canning season. At *Otter Point* for Messrs. J. H. Todd & Son, The B. C. Packers's Asso., Capital City Canning Co. and the B. C. Mess.; one connection in common at Sooke Wharf, $12 for the season.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

BRITISH COLUMBIA—*Continued.*

No.	Stations.	Intermediate Distance.	Agents, &c.	Positions.	Salaries per Annum.	Date of Appointment.	Memo.
	Nanaimo-Comox.	Miles.			$ cts.		
1	Nanaimo	0	W. F. Archibald, A. E. Booth, joint with C. P. R.	Agent and operator..	306 00	Mar. 1, 1896	The amount comprises $20 per month for agency and operation, $3 for messenger service and $2.50 for battery care.
				Assistant operator...	120 00	June 1, 1902	
2	Wellington	5	E. & N. Ry. Co...	Agent and operator..	Commiss.	April 1, 1893	
3	Parksville	23	Mrs. R. Williams	" " .	360 00	Dec. 1, 1897	
			W. Mills	Lineman	360 00	June 1, 1903	Parksville, Quellicum section.
4	Union Bay	32¼	Miss E. McDonald	Agent and operator..	360 00	" 3, 1898	
			Thos. Hudson...	Lineman	780 00	Nov. 17, 1898	
5	Union Mines		J. Dunsmuir	Accommodat'n office.			See mention of this in body of report (1897-98).
6	Cumberland	10	Albert Peacy	Agent and operator	120 00 com. 25 p.c.,	Apr. 28, 1898	
7	Courtney	7	J. McPhee & Son.	Telephone agent....	com. 25 p.c.		Courtney and Comox communicate by telephone at prearranged intervals.
8	Comox	7¾	M. McDonald ...	Agent and operator..	360 00	Nov. 1, 1895	
	Totals	81			2,766 00		
	Parksville, Alberni and Cape Beale Line.						NOTE—The repairs of this line has been done jointly with the Can. Pac. Telegraph since December 1, 1902.
	Parksville	0	(See above).				
	Alberni	29½	Mrs. P. A. Haslam	Agent and operator..	240 00	Oct. 1, 1899	Proportion of salary for Comox line included.
1	Bamfield Creek	53	Can. Pac. Tel.		com. 50 p.c.	Dec. 1, 1902	
2	Cape Beale	4	M. Patterson.	Agent and operator..	240 00	May 1, 1900	Proportion of salary for this line.
		86½			480 00		

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

BRITISH COLUMBIA—*Continued.*

No.	Stations.	Intermediate Distance.	Agents, &c.	Positions.	Salaries per Annum.	Date of Appointment.	Memo.
	Alberni-Clayoquot Line.				$ cts.		
1	Alberni	0	P. O. Haslam	Agent and operator.	120 00	Dec. 1, 1902.	Proportion for this line.
2	New Alberni	2	E. A. Waterhouse	"	Com. 25 p.c	Oct. 1, 1903.	
	Franklin Creek ½ mile cable.	8					Line crosses canal at this point by submarine cable.
3	Uchucklesit*	10	E. B. Girard	Agent lineman	660 00	Oct. 1, 1902.	Section extends from Franklin Creek to Pipestem Inlet; post office address, New Alberni.
4	Uchuclet	10½	W. L. Thompson	"	720 00	Dec. 1, 1902.	
			H. J. Hillier	Lineman	780 00	" 1, 1902.	
5	Clayoquot	6½	E. S. Reeve	Agent lineman	720 00	" 1, 1902.	
	Stubbs' Island			Accommodati'n office			Private cable connection for local firm.
	Totals	96¾			3,000 00		
	Golden-Windermere Line.						
1	Wilmer	0	R. A. Power	Agent and lineman	780 00	Jan. 1, 1902.	
2	Athalmer	5	Teleph. connection				Operated from Windermere, Wilmer and Spillimacheen.
3	Windermere	5	"	G. C. Pitts		July 1, 1901.	" Spillimacheen and Athalmer.
4	Spillimacheen	16	W. F. Dunn	Agent and lineman	900 00	Jan. 1, 1902.	Local superintendency.
			Teleph. connection.				Operated from Windermere, Wilmer and Athalmer.
5	Golden	66	W. A. Decow	Agent and operator.	480 00	Dec. 1, 1904.	Joint agent with C. P. Tel.
	Totals	92			2,160 00		

*Telephone connection between this office and premises of the Nathmint Mining Company.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

BRITISH COLUMBIA—*Concluded.*

No.	Stations.	Intermediate Distance.	Agents and Operators.	Salaries per Annum.	Date of Appointment.	Memo.
	Vancouver-Salt Springs Line.					
1	Duncan Station	9	E. Castley	Commission 25 p.c.	July 1, 1905	
2	Maple Bay	3	T. Aitken	" 25 p.c.	" 1, 1905	
3	Chisholms	¾	A. Chisholm	" 25 p.c.	" 1, 1905	
4	Edwards' Store	3	Edwards & Co	" 25 p.c.	Mar. 1, 1902	
5	Ganges Harbour	9	E. Purvis	" 25 p.c.	July 1, 1905	
	Totals	24¾				

There have been no staff appointments on this line, it being worked by telephone for the present merely for general convenience and looked after by the persons directly interested.

GOVERNMENT TELEGRAPH SERVICE.

YUKON LINES.

NAMES of employees and monthly salaries, &c., Yukon Telegraph Service, which includes Port Simpson, Barkerville, Quesnelle and Lillooet branches.

Number.	Stations.	Intermediate Distance.	Positions.	Salaries per Month.	Tariff.	Night Rate.
				$ cts.		
			C. E. Gooding, manager	60 00		
			C. Belleau, operator	45 00		
1	Ashcroft		E. J. Larson "	42 00		
			R. B. Demorest, lineman	75 00		
			R. P. Quain, clerk	83 37		
	Cache Creek	4	Accommodation office	50 p. c. com.	25 and 2	25 and 1
2	Bonaparte	3½	" "	"	25 " 2	25 " 1
3	Pavilion *	36½	Mrs. Bryson	"	50 " 3	25 " 1
4	Lillooet *	22	S. A. McFarlane, agt. & lineman	60 00	50 " 3	25 " 1
5	Clinton	33	E. LeBourdais, opr. and lineman	60 00	25 " 2	25 " 1
6	115 Mile House	55	L. LeBourdais " "	60 00	25 " 2	25 " 1
7	150 "	35	T. F. Murphy " "	75 00	50 " 3	30 " 2
8	Harpers Camp †	33	S. H. Patenaud " "	60 00	50 " 3	30 " 2
9	Bullion †	27				
10	Quesnelle Forks	4	O. Landry, operator and lineman	66 74	50 " 3	30 " 2
11	Soda Creek	28½	C. H. Smith " "	60 00	50 " 3	30 " 2
12	Alexandria	21	G. A. Broughton " "	60 00	50 " 3	30 " 2
13	Quesnelle	33	W. Peter " "	75 00	50 " 3	30 " 2
14	Lafontaine ‡	46	Cariboo Consolidated Co	50 p. c. com.	50 " 3	
15	Barkerville ‡	15	D. M. LeBourdais, opr. & lineman	60 00	50 " 3	
16	Blackwater & Fraser Lake		G. Duclos, lineman	70 00		
		42	J. Ward, operator	75 00	75 " 5	
17	Bobtail Lake	37	R. W. Smith "	75 00	75 " 5	
			W. J. McAllan, lineman	70 00		
18	Stoney Creek	32	W. J. Milne, operator	75 00	75 " 5	
			J. D. Charleson, lineman	70 00		
19	Fraser Lake	21	G. W. Proctor, operator	75 00	75 " 5	
			M. McNevin, lineman	70 00		
20	Burns Lake	55	M. McKinley, operator	75 00		
			V. N. Clark, lineman	70 00	100 " 7	
21	South Bulkley	27	E. Barret "	70 00	100 " 7	
			J. A. Hodder, operator	75 00		
22	North Bulkley					
23	Bulkley Ranch	52	H. N. Boss, operator	75 00	125 " 10	
			H. Fink, lineman	70 00	125 " 10	
24	Morricetown					
25	Hazelton	50	G. M. Swan, operator	100 00	125 " 10	
			E. R. Cox "	100 00		
			E. E. Charleson, line foreman	150 00		
			W. W. Wratha, opr. and lineman	75 00		
			F. Charleson, lineman	70 00		
26	Meanskinisht §	35	K. O'Neil, operator	50 00	125 " 10	
			R. Tomlinson, lineman	75 00		
27	Skeena Canyon §	47	J. W. Graham, operator	75 00		
			C. Durham, lineman	70 00		
28	Lorne Creek §	24	J. E. Wise, operator	75 00		
			C. E. Carpenter, lineman	70 00		
29	Kitselas		S. W. Dobbie, operator	75 00		
			H. Daniels, lineman	70 00		
30	Kitsumkalum		P. Burnell, operator	75 00		
31	Hole-in-Wall		W. Loiselle "	75 00		
32	Graveyard Pt. §		J. O'Regan "	75 00	150 " 10	
			F. D. Wilson, lineman	70 00		
33	Telegraph Point §	53	J. H. Waller, operator	75 00		
			J. Otero, lineman	70 00	150 " 10	
34	Aberdeen §	4½	H. N. Boss, operator	75 00		
			R. Donaldson, lineman	70 00		
35	Port Simpson §	39	M. W. O'Neil, operator	50 00		
36	1st Cabin	27	H. A. Cullon "	75 00		
			Hugh Taylor, lineman	70 00		

* Branch from Ashcroft. † 150 Mile House. ‡ Quesnelle. § Hazelton.

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

NAMES of employees and monthly salaries, &c., Yukon Telegraph Service, &c.—*Con.*

YUKON LINES—*Continued.*

Number.	Stations.	Intermediate Distance.	Positions.	Salaries per Month.	Tariff.	Night Rate.
				$ cts.		
37	2nd Cabin	22	H. Corner, operator	75 00		
			T. J. Hughes, lineman	70 00		
38	3rd Cabin	25	W. J. Tonvie, operator	75 00		
39	4th Cabin	20	Douglas Potts, operator	75 00		
			H. P. Large, lineman	70 00		
40	5th Cabin	20	E. A. Hawley, operator	100 00		
			W. Ross, lineman	$3 per day		
41	6th Cabin	20	G. T. Brown, operator	100 00		
			G. Barrett, lineman	$3 per day		
42	7th Cabin	19	T. E. Hankin, operator	100 00		
			L. Dubois, lineman	$3 per day		
43	8th Cabin	19	G. Hill, operator	100 00		
			R. Todd, lineman	$3 per day		
44	9th Cabin	17	C. W. Smith, operator	100 00		
			C. Jepsen, lineman	$3 per day		
45	Echo Lake	32	J. Muir, operator	100 00		
			C. Vance, lineman	$3 per day		
46	25-Mile Cabin	25	E. Barrett, operator	100 00		
			Ernest Seeley, lineman	$3 per day		
47	Raspberry Creek		J. A. Thorne, operator	82 50		
			A. H. Webb, lineman	75 00		
48	Iskoot	16	F. N. Jackson, operator	100 00	175 and 10	
			F. Bullock-Webster, lineman	$3 per day		
49	Telegraph Creek	61	A. S. Gillespie, operator	100 00		
			W. S. Simpson, lineman	175 00		
			A. J. Charleson, line foreman	50 00		
50	Shesley	45	A. Johnson, operator	82 50		
				75 00		
51	Nahlin	61	S. G. Lawrence, operator	82 50	200 " 15	
			J. Pilling, lineman	75 00		
52	Nakina	49	Geo. Coutts, operator	82 50		
			J. Haston, lineman	75 00		
53	Pike River	40	R. J. Barton, lineman & operat.	82 50		
54	Atlin	23	F. W. Dowling, circuit manager.	116 66		
			A. B. Taylor	100 00		
			D. H. Gagné, line foreman	75 00		
55	Center Cabin	35	J. Stronach, operator	82 50	225 " 15	
56	Tagish	40	J. B. Watson, operator	82 50		
			A. Stanbridge, lineman	75 00		
				75 00		
57	Carcross	18	S. E. Chambers, operator	82 50		
58	White Horse	65		175 00	250 " 15	
			H. Gilchen, actg. supt	150 00		
			J. Hope, operator	115 00		
			W. Lafontaine, clerk	75 00		
			H. Kamayama, cook & housekpr.	75 00		
			Wm. Watson, messenger	25 00		
				75 00		
59	Lower Leberge	59	Douglas Potts, operator	82 50		
60	Hootalinqua	30	R. T. McDonald, operator	82 50		
61	Big Salmon	34	H. O. Lokken, lineman	75 00		
			W. C. Fraser, operator	82 50		
62	Tantalus	30	R. Daoust, operator	82 50		
63	Five Fingers		R. O. Freeman, operator	82 50		
64	Yukon Crossing	8	Aubry Tennant, operator	82 50		
			M. Monson, lineman	75 00	275 " 75	
65	Fort Selkirk	50	Geo. A. McLachlan, operator	82 50		
			C. Harkness, lineman	75 00		
66	Selwyn	30	R. P. Hall, operator	82 50		
			A. Morrison, line foreman	75 00		
67	Stewart River	75	Gustin Aish, operator	82 50		
68	Ogilvie	23	J. W. Wilkinson, operator	82 50	300 " 20	

GOVERNMENT TELEGRAPH SERVICE—*Continued.*

NAMES of employees and monthly salaries, &c., Yukon Telegraph Service, &c.—*Con.*

YUKON LINES—*Concluded.*

Number.	Stations.	Intermediate Distance.	Positions.	Salaries per Month.	Tariff.	Night Rate.
				$ cts.		
69	Dawson	48	W. Brownlow, manager	150 00		
			D. S. McKenzie, day operator	125 00		
				125 00		
			J. P. Champagne, cashier	125 00		
			A. S. Killam, messenger	$3 per day		
				100 00		
				80 00		
			C. A. Couture, line foreman	125 00		
70	Forty Mile	55	W. H. Mullin, operator	82 50		
71	Boundary	40			325 "	
	Prince Rupert		H. B. Rochester, operator	75 00		
			K. Smith, lineman	70 00		
	Vancouver		J. T. Phelan, acting supt.	175 00		
			J. J. Healy, clerk	140 00		
			Emma Keays, stenographer	75 00		
	Total	2,252½				

YUKON TARIFFS.

The rates given above for points north of Quesnelle are one-third less than those primarily adopted, which were calculated on the general basis of 50 cents for 100 miles and 25 cents for each additional 100 miles, counting the distance from Ashcroft.

The local rates between offices north of Quesnelle are calculated on the basis of 50 cents for 100 miles and 25 cents for each additional 100 miles, and the local rates between offices north of Atlin are fixed at 50 cents for each 100 miles.

Cable Messages.—On transatlantic business, the word rate is twice as much as the additional word rate given in the list for all points north of Ashcroft-Barkerville, 3×2=6c.; Dawson, 20×2=40c. per word.

On transatlantic business the word rate is the additional word rate plus 4c.; Barkerville, 3+4=7c; Dawson, 20+4=24c. per word to or from Ashcroft.

Press Despatches.—For the Yukon line the rate is 1 cent per word, minimum charge, $1; this applies to the whole line. Exception, Barkerville-Ashcroft section (local), minimum charge 50 cents.

Yukon system connects at boundary with U.S. Sig. Service Telegraph System.

GOVERNMENT TELEGRAPH LINES.

SPECIAL TARIFF.

Cable Messages.—Rates for cable messages passing over the Yukon line will be found in connection with the Yukon tariff in the preceding pages.

Elsewhere, the rate for transatlantic messages passing over the government lines is the same as for ordinary through messages, excepting where the ordinary tariff is more than 25 cents; in such cases the government line rate is 4 cents per word, with a minimum charge of 25 cents. For example:—

For a message of six words or less, the charge is 25 cents for government lines.

For a message of seven words the charge is (7×4) 28 cents for government lines.

For a message of twelve words the charge is (12×4) 48 cents for government line.

In every case the counting of words includes the address and signature in the same way as for transatlantic cable tolls.

Press Despatches.—The rate for press despatches on the government lines (excepting the Yukon line), is 20 cents per 100 words; no single message less than 20 cents.

For the Yukon line the rate is 1 cent per word, minimum charge $1; this applies to the whole line. Exception, Barkerville-Ashcroft section (local), minimum charge 50 cents.

REGULAR TARIFF.

NOVA SCOTIA.

Line from North Sydney to Meat Cove and Mabou—Local rate, 25-1 (20 offices).*

Big Bras d'Or	Through rate 15-1 from North Sydney, W. U. office.		
New Campbellton's (Kelly's Cove)	"	"	"
Englishtown	"	"	"
Baddeck	"	"	"
Murray	"	"	"
Indian Brook	"	"	"
French River	"	"	"
South Ingonish	"	"	"
Ingonish	"	"	"
Neil's Harbour	"	"	"
Dingwall	"	"	"
Aspy Bay	"	"	"
Meat Cove	"	"	"
Pleasant Bay	"	"	"
Chetieamp	"	"	"
Grand Etang	"	"	"
Northeast Margaree	"	"	"
Margaree Harbour	"	"	"
Southwest Margaree	"	"	"
Inverness Town (Broad Cove)	"	"	"

* When the tariff rate is entered as 25-1 or 50-2, &c., the meaning is that the rate is 25 cents or 50 cents for ten words and 1 cent or 2 cents for each additional word.

Night messages are exchanged with the Western Union Telegraph Company for offices on this line. Rate, 1 cent per word with minimum of 15 cents. The local night rate is 1 cent per word with minimum of 25 cents.

Line from Barrington to Cape Sable—Local rate, 12-1.

Newellton	Through rate 12-1 from	Barrington, W. U.	office.
Cape Sable Lighthouse	"	"	"

This line is now operated by the local telephone company. Terms of lease provide for former telegraph rate as above not being exceeded.

NEW BRUNSWICK.

Line from Chatham to Point Escuminac—Local rate 25-1 (4 offices).

Bay du Vin	Through rate 15-1 from	Chatham, G. N. W.	office
Lower Hardwicke	"	"	"
Escuminac	"	"	"
Pt. Escuminac Lt. House	"	"	"

Line from Eastport, Me., to Campobello, Grand Manan, and Whitehead Islands (9 offices)—Local rates between offices on Grand Manan and Whitehead Islands, 15-1; Grand Manan and Campobello Island, 25-2; The Islands and Eastport, Me., 25-2, W. U. O.

Welchpool, Campobello	Through rate 25-2 from	Eastport, Me., W. U.	office.
Flagg's Cove, Grand Manan	"	"	"
Castalia	"	"	"
Woodward's Cove	"	"	"
Grand Harbour	"	"	"
Seal Cove	"	"	"
Southern Head	"	"	"
Cheney's Head	"	"	"
Whitehead Islands	"	"	"

QUEBEC.

Line from Gaspé to Anticosti Island, Q. (9 offices)—Local rates between offices on the Island, 25-1; Gaspé and the Island offices, 50-2.

South-West Point	Through rate 50-2 from	Gaspé, G. N. W.	office.
Salt Lake	"	"	"
Shallop Creek	"	"	"
South Point	"	"	"
Heath Point	"	"	"
Fox Bay	"	"	"
Becscie River	"	"	"
West Point	"	"	"
English Bay	"	"	"

Line from Meat Cove, C.B., N.S., to Magdalen Islands, Q (9 offices)—Local rates between offices on the Islands, 25-1; Meat Cove and the Islands, 50-2; offices on the Meat Cove line and the Islands, 50-2.

Amherst Island	Through rate 50-2 from	North Sydney, W. U.	office.
Amherst Lt. House	"	"	"
Etang du Nord Village	"	"	"
Etang du Nord Lt. House	"	"	"
Cap aux Meules (Grindstone)	"	"	"

House Harbour.. .. ..Through rate 50-2 from North Sydney, W. U. office.
Grosso Isle.. .. .. " " "
Grand Entry.. .. .. " " "
South Beach.. .. .. " " "
Bryon Island.. .. .. " " "

Line from Meat Cove, C.B., N.S., to St. Paul's Island—Local rate between offices on Meat Cove line and St. Paul's, 50-2 (1 office.)

St. Paul's Island Lt. House, 50-2 from North Sydney, N.S., W. U. office.

Line from Quebec to Grosse Isle Quarantine Station (7 offices)—Local rates between offices on Orleans Island and Isle Réaux, 15-1; on Orleans Island, Isle Réaux and Quebec, 15-1; on Orleans Island and Grosse Isle, 25-1; on Isle Réaux and Grosse Isle, 15-1.

St. Pierre, Orleans Island.. .. ..Through rate 15-1 from Quebec, G. N. W. office.
Ste. Pétronille.. .. .. " " "
St. Laurent.. .. .. " " "
St. Jean.. .. .. " " "
St. Famille... .. .. " " "
St. François.. .. .. " " "
Isle Réaux.. .. .. " " "
Grosse Isle.. .. .. " 25-1 " "

Lines in Chicoutimi District, including points west of Bersimis.—Local rate between offices within 100 miles apart, 15-1; over 100 miles, 25-1. Between offices on government line and offices on the G. N. W. Company's line as far as and including Quebec, 25-2. Through rate is the above-mentioned local rate between government line offices to connect with the G. N. W. Tel., plus the full charge of the G. N. W. Tel. Co, for points beyond Quebec.

Line from Bersimis to Chateau Bay, with branch to Anticosti from Long Point of Mingan.—Local rate between offices within 100 miles apart, 15-1; over 100 miles, 25-1; on mainland and Anticosti, 50-2. These same rates apply to government line offices east and west of Bersimis.

The checking of all through business exchanged with the G. N. W. Tel. Co. is done with Quebec.

ONTARIO.

Line from Leamington to Pelee Island (Telephone Circuit)—Local rates between Leamington and Point Pelee, 15-1; mainland and Island offices, 25-1; offices on the island, 15-1 (8 offices).

Gun Club House, mainland.. ..15-1 (through business) from Leamington, G.N.W.
Point Pelee, mainland... .. .. " " "
Leamington Dock.. .. .. " " "
Bairds.. .. .. " " "
North Pt. Lt. House, Pelee Id. " " "
North Dock, Pelée Isltnd... .. " " "
McIntyre's Corners... .. .. .. " " "
West Dock, Pelee Island.. .. .. " " "
South Dock.. .. .. " " "

NORTHWEST TERRITORIES.

Line from Qu'Appelle (C.P.R. Sta.) to Edmonton, Alberta—Local rates, 15-1, 25-2, 50-3, for distances 10 to 600 miles (13 offices).

Fort Qu'Appelle	25-2	Qu'Appelle or Saskatoon.
Touchwood	"	" "
Saskatoon	"	"
Saskatoon (T's office C.P.R. Tel.)	"	"
Henrietta	"	"
Battleford	"	"
Bresaylor	25-2	Saskatoon; 50-3 Qu'Appelle or Edmonton.
Onion Lake	"	"
Moose	"	"
St. Paul de Métis	50-3	Saskatoon, Qu'Appelle or Edmonton.
Saddle Lake	"	"
Victoria	25-2	Edmonton; 50-3 Qu'Appelle or Saskatoon.
Andrew	"	"
Star	"	"
Fort Saskatchewan	"	"
Edmonton (Transfer office, C.P.R. Tel.)	"	"
Athabasca Landing	"	"

Line from Moosejaw (C. P. Stn.) to Wood Mountain—Local rates, 25-2 (1 office.)

Wood Mountain . . . . . 25-2 from Moosejaw.

BRITISH COLUMBIA.

Line from Victoria to Cape Beale—Local rate, 50-3 (6 offices).

Sooke	50-3	from Victoria, C. P. R. Tel. office.
Otter Point	"	" "
Jordan River	"	"
Port San Juan	"	"
Carmanah Lt. House	"	"
Cape Beale	"	"

Line from Nanaimo to Comox—Local rate, 25-2 (9 offices).

Wellington (C.P.R. and E. & N. Ry.)	25-2	from Nanaimo
Parksville	"	or Wellington
Fanny Bay	"	"
Cumberland	"	"
Union Bay	"	"
Union Mines	"	"
Courtney	"	"
Comox	"	"
Alberni (branch)	"	"

Line from Alberni to Cape Beale—Local rate, 50-3.

Between offices on the Victoria-Cape Beale line and the Nanaimo-Comox line, via Alberni, 50-3.

Line from Golden to Windermere—Local ra e. 25-2 (3 offices).

1. Athalmer.. .. .. .

APPENDICES

GOVERNMENT TELEGRAPH SERVICE

ANNUAL REPORT FOR 1907-8.

Sectional reference (1) Cape Breton lines.
(2) Magdalen Islands.
(3) Anticosti Island lines.
(4) Bay of Fundy lines.
(5) North Shore, St. Lawrence and Chicoutimi.
(6) Quarantine Telegraph system.
(7) Pelee Island system.
(8) Northwest lines.
(9) British Columbia lines.
(10) Kamloops-Penticton lines.
(11) Yukon telegraphs.
(12) Report of Inspector, Yukon telegraphs.
(13) Cable ship *Tyrian*.

REPORT No. 1.

St. John, N.B., November 9, 1908.

D. H. Keeley, Esq.,
General Superintendent, Government Telegraph Service,
Ottawa, Ont.

Dear Sir,—I beg to submit the following report on the government telegraph lines in Cape Breton, covering the period from July 1, 1907, to March 31, 1908.

	Miles in operation.	No. of officers.	No. of operators.	No. Reps. and gen. linemen
Meat Cove	176¾	20	20	7
Mabou-Meat Cove	109	9	9	10
Mabou-Hawkesbury and North Sydney	228½	20	20	4
Boularderie and Eskasoni	92	16	16	6
St. Paul	3	1	1	
	609¼	66	66	27

New lines have been constructed on Port Hood islands, connecting with the main line at Port Hood, adding to the mileage 3½ miles of poles, and 7 miles of wire.

A new extension between Grand River and Enon was also completed with a pole mileage of 16½ miles and wire 19 miles.

The total increase being 20 miles of poles, and 26 miles of wire.

The pole line from Meat Cove to Ingonish, which was shown in my last report as in bad condition, has been renewed; 1,691 native wood poles, 23 x 5, having been set, in place of the defective ones, under the supervision of general repairer S. S. Burke. The line between Mabou and Strathlorne was also strengthened by the renewal of 60 defective poles.

New offices were opened at—

Briton Cove, with D. B. McLeod as agent, August 1, 1907.
Port Hood Island, with Elsie M. Smith as agent, November 1, 1907.
Port Hood, outer island, with Cassie McLennan as agent, November 8, 1907.
Strathlorne, with Rosella McLean as agent, November 5, 1907.
Eskasoni, with Mrs. S. McMillan as agent, October 1, 1907.
Loch Lomond, with Mrs. J. Fraser as agent, February 19, 1908.
Grand River Falls, with Mrs. E. D. McKillop as agent, March 16, 1908.

Captain E. M. Dickson was appointed general repairer of the North Sydney-Scatarie section, September 1, 1907, at a salary of $45 per month, and in addition is allowed his expenses and horse hire when out on the line.

Station repairer J. A. McLean, of the Barren-Pleasant Bay section, resigned December 31, and up to the present time the position remains unfilled. (This position was subsequently filled by the appointment of Edward J. Timmins, from April 1, 1908.)

No interruptions of moment, interfering with the operation of the lines, have been reported during the term, which would indicate that the lines are receiving attention at the hands of the different repairmen.

Yours faithfully,

D. C. DAWSON,
Superintendent.

REPORT No. 2.

GRINDSTONE, M.I., September 21, 1908.

D. H. KEELEY, Esq.,
General Superintendent,
Government Telegraph Service, Ottawa, Ont.

DEAR SIR,—As per your request, I beg to submit this brief report, which I hope will furnish you the required information.

A repair of the line has been necessitated in many instances, as for example, where the thaw in different places has forced the posts out of the ground. At Amherst, where the main road was condemned on account of being too close to the falling Cape, near the sea-shore, a removal of the line following that section of the road had to be shifted. One new office was opened at Old Harry, June 16, connected by an additional extension of one mile to join between the loop line of Grosse Isle and Grand Entry.

This covers the labour for the operation of our line. Cables crossing Bryon Island; the two ¼ mile connecting House Harbour, and the lagoon cables between Etang du Nord and Amherst have given very good satisfaction.

Yours faithfully,

A. LEBOURDAIS,
District Superintendent.

REPORT No. 3.

WEST POINT, ANTICOSTI, Sept. 20, 1908.

D. H. KEELEY, Esq.,
General Superintendent, Government Telegraph Service, Ottawa ,Ont.

DEAR SIR,—I beg leave to submit herewith my annual report on government telegraph service under my charge for the year ending March 31, 1908, as requested by your telegram of the 18th instant. I am pleased to say that our line is in good working order on its whole length. We have 230 miles of line in operation, and owing to the hard and dangerous travelling the cost for keeping it in good condition is comparatively high. Last summer, Mr. A. Gobeil, then Deputy Minister of Public Works, paid us a visit and made an arrangement with Mr. Menier's guards to repair the line. This arrangement was as follows:—

The guards undertook to repair the line for one year beginning November 1, 1907, for the sum of $460. There were seven guards placed at different points along the line. Six were paid $60 and one $100. This arrangement took effect on Novem-

ber 1, 1907, as agreed, and I must say it gave us entire satisfaction. But I was notified last July that the guards would not continue the contract for another year and that they would cease looking after the line on October 31, which notice I have transmitted to you by letter.

This will leave me without means of having line repaired when an interruption occurs, as all the operators, with the exception of one, refuse to go on local repairs, it being impossible for them to leave their offices.

We have nine telegraph stations. The following are the names of said stations and agents, with their respective salaries, viz.:—

Offices.	Staff.	Salary.
English Bay	F. Cabot	$300 00
West Point	Alf. Malouin	50 00
Ellis Bay	Jos. Dugnay	50 00
S. W. Point	A. Lemieux	420 00
Salt Lake	Mrs. J. Bourget	50 00
Shallop Creek	B. Bradley	240 00
South Point	E. Laprise	50 00
Heath Point	C. Hubert	200 00
Fox Bay	Geo. Cabot	300 00
West Point	Lrz Malouin (Substitute)	480 00
Salt Lake	Jos. Bourget, Gen. Repr.	360 00
West Point	Alf. Malouin, Dist. Supt	344 00

Maintenance of the line during the past twelve months amounts to $511.49, but this comprises all amounts that I have to make a disbursement for; all but the salaries.

I have the honour to be, sir,
Your obedient and respectful servant,

ALF. MALOUIN,
District Superintendent.

REPORT No. 4.

GRAND MANAN, N.B., September 19, 1908.

D. H. KEELEY, Esq.,
General Superintendent, Government Telegraph Service,
Ottawa, Ont.

DEAR SIR,—I beg to report on the government telegraph lines in Bay of Fundy district for the year to March 31, 1908, as follows:—

The cable between Grand Manan and Campobello broke on February 14, and was repaired on May 24, 1907.

Cable ship *Tyrian* arrived May 20, and went to work next morning; found the cable broken two miles from Grand Manan and in bad condition for considerable distance. The old cable was taken up and replaced with new, from the 'Cable Hut' at Long Eddy to within a mile of the landing at Herring Cove, Campobello, and has been working well up to the present time.

Mr. McDonald inspected the offices at Campobello and Eastport on the 25th and left for Halifax on the *Tyrian* that evening. I had the cable at Long Eddy buried

from the 'Cable Hut' to low water, also had the cable at Eastport trenched where it came up over the bank to the new hut.

The line on Campobello is in good condition except that we need to use a heavier wire where the line goes through the woods. I will have this put up before winter sets in.

At Eastport, we had the line thoroughly overhauled and all old wire taken down. The city requested that our poles be painted and this was also done.

On Grand Manan, the telephone company use our poles, and have kept them in good condition since they completed their work, but we had considerable trouble at first.

The telephone line from Seal Cove to Southwest Head lighthouse needs to be renewed as the poles are rotting and thrown out by frost. The very severe thunder and lightning storms of this year, caused considerable trouble on this line, but it is now working very well.

The keeper at South Head lighthouse resigned, and his place was taken by Mr. Clyde Ingersoll in August, 1907.

The line from Grand Harbour to Whitehead Island, which is composed of three and three-quarter miles of land line, and three pieces of cable is in good condition and working well.

The offices are all well kept, and have been working very satisfactorily through the year. The names of operators and linemen will be found in the tabulated statement.

Yours truly,

C. C. SEELEY,
District Superintendent.

REPORT No. 5.

GOVERNMENT TELEGRAPH SERVICE,
CHICOUTIMI, September 18, 1908.

District superintendent's report on line from Quebec to Bersimis, in the counties of Quebec, Montmorency, Charlevoix, Chicoutimi and a part of Saguenay to Bersimis, for the twelve months ending March 31, 1908.

The office at Chicoutimi is located in the new public building since last March.

The staff of the Chicoutimi office is as follows:—

Office.	Staff.	Amount.
		$ cts.
Superintendent	J. C. Taché	300 00
Inspector and instructor	A. Simard	564 00
Operator	D. Villeneuve	600 00
"	J. Lapointe	360 00
Night operator	T. Villeneuve	360 00
Clerk	J. A. Couet	180 00
Messenger	A. Gagné	120 00
Repairer	J. Fortin	420 00
Rent of office	J. E. Clouthier	120 00

Line No. 13.—From Quebec to Labrador; no change.

Lines 13 and 21, Line No. 21.—Double line from Malbaie to Ste. Catherine, 38 miles; no change.

Line No. 40.—From Baie St. Paul to Chicoutimi, 85 miles. This line is under the same conditions.

Line No. 39.—From Ste. Catherine to Chicoutimi, 83 miles; same condition.

Line No. 41.—From Malbaie to St. Agnes, 12 miles; same as last year.

Line No. 44.—From Baie St. Paul to Petite Rivière, St. Frs. Xavier; same as last year.

Line 45.—From Ste. Anne to Lac Clair, 10 miles; same as reported 1906-7.

Line No. 42.—The line from Chicoutimi to St. Charles Borromée, 18 miles, with two loop lines, Shipsaw North, 2 miles, and St. Ambroise, 4 miles, was extended to Rivière a la Pipe, a distance of 32 miles, and is in good working order.

The offices are distributed as follows, with distance between each:—

From St .Charles Borromée to Taché, 7 miles.

From Taché to intersection of the road of St. Joseph d'Alma village, a loop line, 3 miles.

From intersection of road to St. Cœur de Marie, 5 miles.

From St. Cœur de Marie to St. Henri de Taillon, 6½ miles; making a total length of line completed from Chicoutimi to St. Henri de Taillon of 39½ miles.

From St. Henri de Taillon to Honfleur, the line is not completed, the poles are distributed on the ground, the clearance to pass the line is nearly finished, there is about a mile to be completed. The distance from St. Henri de Taillon to Honfleur is 8 miles. The cost of the line was $3,984.55.

Line No. 50.—From Tadousac to Chicoutimi, 82 miles; same as previous report.

The following expenditures were made during the year:—

Repairs to the right of way between St. Alphonse and Chicoutimi	$ 402 10
Repairs to road between Ste. Anne and St. Fulgence, a bridge	503 67
Change of roadway at Lac Clair	100 00
Construction of two camps between St. Fulgence and Lac a Résimon for the use of the repairer	61 70
Repairs to roadway between Moisie and Seven Islands	301 74
Board of Operator Rivard and the landing of P. A. Guay's baggage at-Bersimis	28 50
Construction of a shed at Bersimis for the use of the operator for firewood, &c	217 88
Making a new roadway at Baie des Bacons, between Escoumains and Port-neuf, on account of landslides	938 20
For the reconstruction of the camp at Baie de Laval	289 75
Repairing the bridge on Rivière Ste. Marguerite, between Ste. Anne and Tadousac	269 98
Repairs to the five first miles east of Tadousac, on Bergeronnes road	306 38
Repairs to the White River bridge on the north shore	223 80
Repairs to roadway between Esquimaux Pointe and Piastre Bay, and between Esquimaux Pointe and Mingan	1,015 00
Reconstruction of the camp at Rivière Eternité, on road between Anse St. Jean and Chicoutimi	456 50
Repairs of roadway between Ste. Catherine and Baie des Rochers, in Charlevoix county	199 97
Bought materials from Ahearn & Soper, Limited	846 90
Freight, a clock, galv. wire, cartage, minor services at Chicoutimi office	127 99
Making a total for repairs of	$9,157 73

Cost of the maintenance of the different offices, including salaries of operators and expenses in connection with the keeping of the offices.

April, 1907	$ 694 19
May, 1907	797 94
June, 1907	786 65
July, 1907	761 08
August, 1907	865 50
September, 1907	875 77
October, 1907	864 39
November, 1907	775 21
December, 1907	830 96
January, 1908	754 06
February, 1908	817 80
March, 1908	1,131 44
Making a total of	$9,954 98
Including the amount of general repairs and construction of line	9,157 73
Grand total	$19,112 71

REPORT No. 6.

St. Jean, I.O., November 30, 1908.

D. H. Keeley,
Gen. Supt. Government Telegraphs,
Ottawa, Ont.

Dear Sir,—I beg to submit my annual report of the telegraph lines and cables in my district, comprising the quarantine line and the cables of Crane island, Ile aux Coudres, &c., as described in this report.

As in the past years, the telegraphic and telephonic cables of my district were broken by the ice in the winter of 1906-7. The cables between L'Ange Gardien and St. Pierre and between St. François and Ile aux Reaux were repaired by men from St. François, Ile d'Orleans, in the months of May and June, 1907.

The cable between Ile aux Coudres and Les Eboulements was repaired by men from Ile aux Coudres in the first days of July, 1907.

The cables between Ile aux Grues and Montmagny, and between St. François and Baie St. Paul were repaired by men of the steamer *Tyrian* in September, 1907. There was about one mile added to each where the ice had carried them away. In September, 1907, a cable between Grosse Ile and the Ile aux Grues was lost in the north channel.

All these cables were again broken by the ice in January, 1908.

I must again request the removal of the cable between Grosse Ile and Ile aux Grues, which is in a very much exposed location, and which will surely be broken every year. If this cable was moved further north, where the channel is deeper, it would be in safety for a long time.

The land line under my direction should be partially reconstructed as soon as possible, especially that of Grosse Ile and of Ile aux Reaux, where it is in such order that I have work continually to keep it in order; the posts are bad, and it is only with the aid of a large number of supporting wires that they are kept in place. It might be advantageous to place the wires on the electric light post at Grosse Ile; this

could be done rather cheap. I would also insist on constructing a suitable house (bath cable), where the cables land, which would put under cover the men working at that place. The work would thus be done quicker and would save the rent of a small boat, which costs each year more than those houses.

I also recommend the construction of a boat of 18 or 20 feet, built in a special manner and suitable to the work of laying cables. I could have this boat built here during the winter, so that it could be used next season. This boat would cost about $130.

As I have already stated, all the cable I had on hand has been used.

I must say that the lines under my direction gave a fair service during the present year.

A large number of posts which were broken were replaced as quickly as possible.

I must insist that all the stationery or other effects necessary be placed in my hands, so that I may distribute them to the officers in my district. I could easily distribute it to the operatives as wanted. These materials could be stored here.

I must also insist on the acquisition of a tug suitable to the repairs of the cables. It could be bought from one of the towing companies at Quebec at a relatively small cost during the present winter, so that it would be ready in the month of March. This would allow us to repair the cables more quickly and give better satisfaction to the public.

Inclosed you will find all details concerning the administration of all lines, cables, names of agents, salaries, &c., of my division.

I have the honour to be, sir,

Your obedient servant,

J. P. POULIOT,
District Superintendent.

REPORT No. 7.

LEAMINGTON, ONT., Sept. 26, 1908.

D. H. KEELEY, Esq.,
General Superintendent,
Government Telegraph Service, Ottawa, Ont.

DEAR SIR,—In the matter of the Pelee Island telephone system for the term from June 30, 1907, to March 31, 1908, I beg to report as follows:—

1. The line on the island is in good order and repair. During the summer of 1907, the damaged portion of the line near the 'north lighthouse' was repaired and poles replaced. During the latter part of 1907, we were obliged to shift several poles at the west side further inland to a new allowance from public road, the council being obliged to shift the road as the lake had washed away quite a portion thereof. On October 25, I installed an instrument at the residence of James Srigley, situate between the 'west dock' and Pelee south offices, in accordance with instructions received when part of the line was changed, in June, 1907, to run past his house. About the latter part of October the general store of A. McCormick & Son at the west side was burned, the instrument in use there at the time was also burned, and on December 4, I installed a new instrument in their temporary place of business, a short distance from where their former store had been.

2. On the mainland, when repairing the line in November last, I had to put up several new poles, as some of the old ones were too rotten, and we will require to put

up several more during the fall of 1908, when repairing for the winter. There were some very heavy shoves of ice on the mainland shore last winter, and at one place, east of Sturgeon creek, the ice shoves in from the southwest over 150 feet, shoving down some trees and piling up high over the telephone wire on the line for a distance of about 25 feet, so that we had either to cut and splice the wire or else cut it out of the ice for that distance. There has been no such shoving of ice as we had last winter, since the line was erected in 1888. We are now confronted by a new difficulty, as the electric railway line runs on the same street as the telephone line for the greater portion of the distance between the Leamington office and the lake and will, when put in operation, give us trouble by noise, &c., so that it will be necessary to shift the location of the telephone line, besides making it metallic to avoid the trouble from induction, and as the old poles, on the present line, are not suitable, being too light and too much decayed, it will be best to place the new poles we have on whatever line may be selected between the Leamington office and the cable landing, fitting them with a six pin cross arms so that in splitting the line, and placing Pelee Island and Leamington on one line and Point Pelee and intermediate offices and Leamington on a separate line, to be connected by switch at Leamington office.

When required for interchange of messages a double or metallic line may be run from Leamington office to the cable landing, and another double or metallic line can be carried on the Point Pelee branch beyond the points of induction from the electric railway or electric light wires from Leamington office so as to secure as quiet a service as possible. Besides the splitting or separation of the branches of the line will allow of more instruments being placed in the two different sections, there being a call for such additional instruments.

3. The cable was damaged near the channel by vessel anchors during a storm on October 24, 1907, but was repaired and communication restored on November 16 and gave good service until February 2, 1908, when it was damaged by the packed ice shoves, in the deepest water near the channel, during the heavy gales which prevailed at the time, the ice being in a moving condition, the weather not being cold enough to freeze it fast in position. We require, as previously stated, some good cable for repairs, as the old cable on hand is of doubtful quality.

I herewith inclose list of offices, operators or agents and rates of commission or salary, with summary of messages sent and received, from June 30, 1907, to March 31, 1908.

Your respectfully,

JOHN McR. SELKIRK,
District Superintendent.

REPORT No. 8.

KAMLOOPS, B.C., July 15, 1908.

D. H. KEELEY, Esq.,
General Superintendent, Government Telegraph Service,
Ottawa, Ont.

DEAR SIR,—I beg to submit herewith a report of a trip of inspection made by me over the Northwest lines during the past month:—

CONDITION OF LINE.

Qu'Appelle to Fort Qu'Appelle, 18 miles.—This portion of the line is in good working order. Prairie fires did considerable damage to poles, during the early spring, but the necessary repairs have been made. Settlement is now almost continuous, and will

necessitate the removal of all poles to the highway, where such action has not been taken already.

Fort Qu'Appelle to Kutawa, 56 miles.—The line between these points also suffered from prairie fires this season, but, owing to the sharp watch kept, delay to business was prevented, and the line kept in order. Settlers are coming into this district in great numbers and are fencing in portions of our line, but so far no requests have been made to remove it to the road allowance.

Kutawa to South Humboldt, 78 miles.—This part of the line has been kept in order with the greatest difficulty, owing to the unusual prevalence of prairie fires. A large amount of work will be required during the summer to put it in proper repair. There are now sufficient poles at South Humboldt for this purpose.

South Humboldt to Saskatoon, 69 miles.—The same conditions apply as in the previous named section, prairie fires having done considerable damage. About 200 poles will be required to put the section in proper working order.

Saskatoon to Henrietta, 52 miles.—This district is now thickly settled, the line for about one-third of the distance running through enclosed farms, thus rendering it a difficult task for the lineman to make necessary repairs. Fortunately, owing to settlement, prairie fires do little damage, the chief sources of trouble being lightning, and, occasionally, a decayed pole. This section is in good repair, but about 50 new poles should be supplied to replace those unfit to reset.

Henrietta to Battleford, 57 miles.—From Henrietta to 30 miles west (Lineman Salsbury's beat) the line is in good condition; between that point and Battleford it is in very bad order. Fires did much damage between Battleford and 18 miles east, but it is evident that the lineman at Battleford has not given to the line the attention that he should have done. I find that about four-fifths of the serious interruptions on the line this season were on the Battleford section. My driver and myself found ten poles down. About 200 new poles are required to put the line in good order. The town council of Battleford requests that we remove from the main street of the town our present poles and replace them with poles similar in size to those used by the town for electric light and telephone purposes. (This has since been done).

Battleford to Pitt, 97 miles.—Iron poles are used on this section. The line itself is in good order, but considerable underbrushing is required. From a point 24 miles east of Pitt, a loop runs to Lloydminster to rebuild which an appropriation has been asked. This loop has been put in as good order as possible by Lineman Mann, but the poles, being poplar and in place for six years, cannot be kept up much longer. The town council of Lloydmaster asks that new poles, of larger size than those at present in use, be erected along the main street of the town. Supt. Macdonald has the matter in hand.

Lloydminster to Onion Lake, 50 miles.—Of this distance, the first 22 miles is the loop referred to, the line crossing to the north side of the Saskatchewan river at Pitt; the balance of the line is in good repair.

Onion Lake to Moose, 33 miles.—This portion of the line, while in good repair, runs through a swampy, heavily-treed country, and, as the trails are constantly being changed, and the underbrush grows quickly, the lineman has a difficult task to keep it clear.

Moose to St. Paul des Metis, 33 miles.—Here also, the country is swampy, and heavily wooded to within a few miles of St. Paul, but the line is in very good order. About 75 poles are required between Onion Lake and St. Paul.

St. Paul des Metis to Saddle Lake, 24 miles.—The line was in fair order, but many poles should be reset, and a number of new ones supplied.

Saddle Lake to Pakan, 37 miles.—This portion of the line is kept in good order, running for several miles through a sandy tract, thickly grown with jackpine; the

greatest trouble is from falling trees. The trail, however, is good, and interruption is never of long continuance. About 200 poles are required between St. Paul des Métis and Pakan.

Pakan to Andrew, 18 miles.—At Pakan the wire recrosses to the south side of the river. It is in good order.

Andrew to Star, 18 miles.—The line runs through an open country, and is in good order.

Star to Fort Saskatchewan, 25 miles.—Thirteen miles of this portion of the line is new and in good order; much of the balance runs through fields and should be removed to the highway.

Fort Saskatchewan to Edmonton.—At Fort Saskatchewan the wire recrosses to the north side of the river. The line is in perfect condition. Owing to a change made in location of the road allowance, three-quarters of a mile of poles will have to be moved a short distance at one point, and twelve poles in another. Within the city limits a number of changes are required by the Edmonton council. The whole course of our line, from its entry to the city to our office, must be changed and rebuilt to conform to regulations laid down by the Council. While there, I endeavoured to make an arrangement with the authorities of the provincial government to permit us the use of their telephone poles, which covers the entire route. Owing to the absence of the deputy minister, I was unable to arrange definitely, but the superintendent of telephones was favourably inclined, as this service could reciprocate elsewhere. I am hopeful that the matter may be arranged, thereby saving much trouble and expense.

Edmonton to Athabaska Landing.—I found this line in good condition. There had been considerable trouble during this spring, due to falling trees, but no serious delay to business had occurred. An office at Twin Lakes, midway between the two points, would greatly facilitate repairs, by enabling the operators to locate trouble.

STAFF AND BUILDINGS.

Qu'Appelle.—This office is joint with the Canadian Pacific Railway and is the chief transfer point for business between the two lines. The service given is excellent, and is satisfactory in all respects. Lineman J. W. Wilson is resident here, his services being frequently utilized as relieving agent. He is a capable operator.

Fort Qu'Appelle.—P. Elmer, agent. The office is at present in a rented building; the old office, owned by the service, having become unfit for habitation. Mr. Elmer is an exceptionally good operator, is attentive to his work, and gives general satisfaction.

Lipton.—Our office here is in the station of the Canadian Pacific Railway and is operated on a commission basis. Satisfactory service is given.

Kulawa.—The office here, as also the post office, is in the house of agent Von Lindeburgh. Mr. Lindeburgh has had a longer continuous service on the Northwest lines than any other employee, having been connected with the line since 1880. He is an excellent lineman, and a fair operator.

South Humboldt.—H. J. Macdonald is agent at this point, and has probably the most difficult section on the line, there being no testing office for about 75 miles on either side, while it is very subject to prairie fires. There is comparatively little business done here, but as the district is filled up it will probably increase. The office building and the stable are owned by the service, and are badly in need of painting, though otherwise in good order.

Saskatoon.—The office here is joint with the C.P.R. the work being done by their operators. Lineman G. T. Clement is stationed at this point and gives satisfactory service over a difficult beat.

Warman.—The office is in the C.N.R. station, and is operated on a commission basis.

Henrietta.—W. J. Salisbury, agent. Little business is done here, the office being of use chiefly as a repairing station. Mr. Salisbury, who is a first-class lineman, has been continuously in the service since 1886, and had previously been connected with the line when it was operated by the contractors. The old buildings, owned by the service, have fallen down, an office and stable were rented from Mr. Salsbury.

Battleford.—Agent J. D. Noel. From a business standpoint this is at present the most important office in the Northwest served by our line. A large and increasing business is being done. Mr. Noel gives good service, and takes an active interest in his work. A new office was built last year. Perhaps owing to the fact that it was erected in the late fall, the workmanship leaves much to be desired. Lineman W. Dewan is stationed here.

Bresaylor.—J. D. Callahan, agent. The office here is in a rented building. There is now practically no business transacted here, and I would recommend that a set of lineman's tools be given Mr. Callahan, and that he be instructed to hire an outfit, and make the necessary temporary repairs in case of trouble west of him. As he was formerly a lineman he would not find this a hardship.

Lloydminister.—H. McClenaghan, agent. The office here while centrally located is in very cramped and unsanitary quarters, and I would recommend a change of buildings. The business done is increasing and in all probability will continue to do so. Mr. McCleneghan has had a long experience as an operator, and takes an active interest in his work.

Moose.—G. G. Mann, agent. This is a repairing station, very few telegrams being transmitted, but settlers have commenced to flock in although far from railways. Mr. Mann is an expert lineman, and keeps a difficult section in good repair. The office building belonging to the service having been burned last year, the office is now in a building rented from Mr. Mann.

St. Paul des Metis.—The office here is in the building of the R. C. Mission. A larger business is being done, and as settlement is increasing rapidly, it is expected that there will soon be a goodly sized town, with the mission as a nucleus.

Saddle Lake.—J. W. Carroll, agent. A new office owned by the service has just been completed. In point of workmanship, and for comfort and general appearance, it is the best building yet constructed for the service in the west. Mr. Carroll adds to his other duties that of sub-agent Dominion Lands, also clerk to the Indian ageney.

Pakan.—Mrs. Gordon, agent. The office is in a building owned by the service. The wood used in its construction had not been well seasoned, and has shrunk considerably. This renders it cold, and hard to heat in winter. The amount of business here has not varied much for years. The service given by Mrs. Gordon leaves nothing to be desired.

Andrew.—Agent, Miss B. Carey. A fair business is done here. The office is well looked after by Miss Carey. The office is in the store of Mr. Carey. Lineman C. Norn is stationed here. He keeps his section in excellent condition.

Star.—Agent, K. Morrison. Business at this office has fallen off to some extent, owing to the establishment of other towns near by. Its greatest value now is as a testing station. The office is in a rented building.

Fort Saskatchewan.—A. W. M. Campbell, agent. The office here is in the post office and despite the competition of the C.N.R. and long distance telephone, a good business is done. Mr. Campbell gives his work every attention, and is one of our best agents.

Edmonton.—Acting Agent Wilder. We have desk room here in the Canadian Pacific Railway office. It is necessarily crowded and cramped, as they have scant room for their own business. In the event of an increase of work such as would result, should the proposed Peace River line be built, it would be impossible to transact business with the facilities at hand. The new post office at Edmonton is approaching completion. This is a very large building and if it were possible to obtain office room in it no better or more desrable location could be obtained. I would suggest that an attempt be be made to secure the necessary space. Mr. Wilder is an experienced operator, who puts all his heart into his work. It would scarcely be possible to secure a more zealous or trustworthy officer. Mr. G. Macleod is an experienced lineman, thoroughly acquainted with the country, and is a worthy successor to our late lineman, W. McKay.

Athabaska Landing.—Jas. McKernan, agent. The office building is owned by the service, is commodious and comfortable, and worth more to-day than the original cost. Mr. McKernan, who helped to construct the line in 1876, gives the best of service. The office is very important, being the first point of call from the far north.

Speaking generally, the condition of the Northwest lines is satisfactory, both as regards the upkeep of the lines and the quality of service rendered by both agents and linemen. The books are kept more correctly and returns forwarded more promptly than any other line I have inspected.

Moosejaw, Willow Bunch Section.—From Moosejaw to a point ten miles south, the line was removed two years ago to the highway, new poles being used. This portion is in first-class condition. From this point, it should be removed to the highway for another three miles, settlement being continuous. The balance of the line to Wood Mountain required a thorough overhauling. Many of the original poles erected 23 years ago are still in use. The country throughout the entire length of the line is open prairie. Much damage is done, particularly during the winter months, by travellers who, finding themselves without wood, slice off portions of the poles for fuel. In some instances poles have been removed bodily.

During the past year, settlement has increased to a wonderful extent, there being now houses scattered along the entire route, where two years ago there was not a habitation for 75 miles. The number of settlers will largely increase as soon as the new Land Act comes into operation, as it opens up a large territory hitherto closed to settlement. I would recommend that an office be opened midway between Moosejaw and Wood Mountain.

Between Wood Mountain and Willow Bunch the line is in good condition.

STAFF AND BUILDING.

Moosejaw.—Our business here is transacted by the Canadian Pacific Railway.

Wood Mountain.—The office here is in the house of agent J. H. Thompson. No rental is paid. The Royal Northwest Mounted Police have a post here, and for them the line is a necessity. Wood Mountain is the nearest point to the Montana boundary, and all traffic from adjacent United States territory passes through here. Mr. Thomson is a good operator, prompt and correct with his returns, and gives thorough satisfaction. Lineman Brown is stationed here; owing to the many interruptions due to lightning, prairie fires and other causes, the greater part of his time during the summer is spent on the line.

Willow Bunch.—J. D. Noel, agent. The business here is growing, due to the rapidly increasing settlement. Mr. Noel is well liked by the public with whom he does business. The office building is owned by the service. As is common with many buildings in the west, the materials used in construction were not thoroughly sea-

soned, so that the house is not as warm as it should be. Some small repairs are necessary.

Duck Lake-Batoche Telegraph Line, 7 miles.—The majority of the poles on this line are very old, and a number of them should be replaced by new ones. At present the line is working satisfactorily.

Duck Lake.—The agent of the Canadian Pacific Railway acts as our agent here, and gives satisfactory service.

Batoche.—The office is in the store of Mr. D. H. Grant, who is our agent. There is not much business, but the line is a great convenience, and the cost of operating not great.

TELEPHONE LINES.

Kamsack-Indian Agency, 6½ miles.—This line continues to work well, and is a great convenience to the Indian agency and to that portion of the public having business with the agency. A few changes in the line are required in the town of Kamsack, but the cost will be slight.

Fort Qu'Appelle-File Hills, 28 miles.—This line, constructed during the season 1907-8, runs from Fort Qu'Appelle via Lebret and Balcarres, at which point telephones are established to File Hills Indian agency. That it is a great public convenience is attested by Mr. Graham, Inspector of Indian agencies, Rev. Father Hugonard, principal of Lebret industrial school, the Royal Northwest Mounted Police officials and others.

Duck Lake-Indian Agency.—This line continues in good working order and has cost nothing for maintenance.

Saddle Lake Industrial School, 6½ miles.—This line is in good working order.

Andrew-Whitford, 6½ miles.—This line is in good working order. Not much business is transacted over it.

Edmonton-Stoney Plain Centre, 28 miles; Edmonton-Alexandra, 34 miles.—These lines are at present operated by the Edmonton District Telephone Company. They are in good order.

I have the honour to be, sir,
Your obedient servant,

(Sgd.) J. S. MACDONALD,
General Inspector.

REPORT No. 9.

VICTORIA, B.C., June 1, 1908.

D. H. KEELEY, Esq.,
General Superintendent,
Government Telegraph Service, Ottawa, Ont.

SIR,—I have the honour to herewith submit a report on the Government telegraph and telephone lines on Vancouver Island, B.C., and the Golden and Windermere line in East Kootenay, B.C., under my charge, for the year ending March 31, 1908.

Name of Line.	Miles in Operation.	Length of Land Lines.	Length of Cables.	Number of Offices.	Number of Operators.	Number of Lines Repaired.
Victoria-Cape Beale	118	118		6	6	5
Alberni "	57	57		2	2	Repairs made by C.P.R. lineman.
Alberni Clayoquot	86 5/16	86 5/16		7	6	5
Alberni-Clayoquot (Sechart branch telephone)	9	9				
Alberni-Clayoquot (Mosquito Harbour branch telephone)	10 1/4	10 1/4	1/4			
Nanaimo-Comox	90	90		10	10	2
Parksville-Alberni branch telephone	30	30				C.P.R. lineman.
Nanaimo-Comox (Union Bay, Denman and Hornby Island branch telephone)	18	11	7			
Vancouver Island-Salt Spring Island telephone	45	40	5	8	8	Repairs done by agent when necessary.
Golden-Windermere	90	90		4	4	2

Victoria-Cape Beale Line.—As in previous years, 'phones have been supplied to various firms doing business along the coast, to lumber camps, fish trap companies, as well as to the line repairers in their huts, also to the patrol huts of the Marine and Fisheries Department at Tsusiat and Seven Mile River. 'Phone connection was given the headquarters camp of the construction force working the new trail for pack horses in connection with life-saving and aid to navigation. Considerable revenue was derived from this source, as some sixty men were employed. Very considerable improvement in the service on this line has been effected since the establishment, last November, of the Victoria office in the public building in Victoria, with our own operator in charge, and, when the trail is completed by the Marine and Fisheries Department, our wire transferred upon it, and other contemplated improvements effected, viz., improvement of trails, &c., increase of number of line repairers, a still greater improvement will be effected.

Alberni-Cape Beale Line.—The Canadian Pacific Railway Telegraph Company's line repairers maintain this line; when down, the Canadian Pacific Railway operators at Bamfield transmit our messages over the cable from Bamfield to Alberni, or vice versa.

Alberni-Clayoquot Line.—This line has been maintained very well considering the exceedingly rough country through which it runs, the portion between Franklin Creek (where it crosses the Alberni canal by cable) and Effingham Inlet being of the most difficult character. The lineman can only go along the greatest portion of his section by boat, as it would be impossible to cover such lengthy sections in anything like reasonable speed by any other means; this refers to the section from Franklin Creek to Effingham Inlet and from the latter place to Ucluelet, two sections and a half; as it is now too long a time elapses, especially in winter, before breaks are repaired or heavy grounds removed, on account of the difficulty and danger of going over their sections during stormy weather. Motor boats should be supplied to the linemen on the sections referred to for the safe and speedy repairs of the line. The branch line to Mosquito harbour was completed and worked well, giving great satisfaction to the lumber company and settlers at that point, and some considerable revenue was derived for a time, until the milling industry became unproductive and the mill closed down.

Nanaimo-Comox Telegraph Line.—This line has been well maintained and the greatest satisfaction given to the public since the establishment of our own office with our own operator in the public building, Nanaimo. A branch line was constructed from Union Bay to Denman and Hornby Island, the wire being strung on the Nanaimo and Comox poles from Union Bay to Fanny Bay, thence across Baynes Sound by cable to Denman Island, across Denman Island by land line, and thence by cable to Hornby Island, giving telephone connection to the settlers with Union Bay telegraph office to their very great satisfaction.

Vancouver Island-Salt Spring Island Telephone Line.—This line has worked very well and given the best of satisfaction to the settlers on Salt Spring Island. An extension to North Pender Island has been constructed and offices established at Browning Harbour and Hope Bay, which has also been a source of satisfaction to the settlers on that island. Great difficulty was experienced in laying the cable between Beaver Point, Salt Spring Island and the landing on Pender Island on account of stormy weather.

Golden-Windermere Telegraph Line.—Last year a number of the poles on this line were reset and several new poles put up, alder and poplar; brush cut down, and all the 'phones and telegraph instruments put in perfect order. It has now become necessary to reset the balance of the poles. I may also state that the provincial government has changed the location of the road in several places, which necessitated the transfer of the line to the new road for the better maintenance and preservation of the line.

I have the honour to be, sir,
Your obedient servant,

WM. HENDERSON,
Supt. Government Telegraphs.

REPORT No. 10.

SUMMERLAND, B.C., December 21, 1908.

D. H. KEELEY, Esq.,
General Superintendent,
Ottawa, Ont.

DEAR SIR,—I have the honour to herewith submit my report as to the condition of lines under my control.

Kamloops to Louis Creek Section (Fennell line), 36 miles.—This section has just been completed on December 15. In company with my foreman, Mr. Gilbert Genier, I went over the new line last week, inspecting the work. I am glad to report that the construction is of the very best for this class of line. Further reports relative to this section to follow.

Kamloops to Nicola Section, 55 miles.—This section was reset in 1905, the butts being covered with a solution of carbolineum. This preservative has so far given good results, although I am not quite clear yet as to what the general result will be upon the old poles.

Nicola to Lower Nicola Section, 12 miles.—This section was re-set at the same time as the above, with this exception, that the carbolineum not having arrived when the work began, I used tar for the butts, which has not proven to be anything like as good as a preservative. This section will have to be rebuilt in 1909.

Nicola to Hedley Section, 97 miles.—This section appears to be in good condition, but it is exceptionally hard to maintain, owing to the continual falling of trees by storms which are prevalent in this section of the country.

Hedley to Penticton, 59 miles.—This section is in good condition, and for about 20 miles is subject to the same troubles as the section above.

Penticton to Kelowna, 45 miles.—This section, built under my direction in 1905, is in first-class condition, experiencing very little trouble in maintenance.

Kelowna to Vernon Section, 35 miles.—At the present time this section is being rebuilt, and an extra circuit strung in No. 10 copper, the latter to be used for the telephone circuit, and the single iron circuit to be used for telegraph purposes.

Vernon to Lumby Section, 17 miles.—This section, built last year, is in good condition, requiring but little expense in maintenance.

Total mileage under my care as follows:—

	Miles.
Louis Creek to Kamloops	36
Kamloops to Nicola	55
Nicola to Lower Nicola	12
Nicola to Hedley	97
Hedley to Penticton	59
Penticton to Kelowna	45
Kelowna to Vernon	35
Vernon to Lumby	17
Total	356

Faithfully yours,

CHAS. S. STEVENS.
Superintendent.

REPORT No. 11.

VANCOUVER, B.C., December 5, 1908.

D. H. KELLEY, Esq.,
General Superintendent,
Ottawa, Ont.

DEAR SIR.—I beg to submit herewith my report covering the operation of the Yukon telegraphs for the fiscal year of 1907-8:—

Main Line, Ashcroft to Boundary.—The working conditions on the main line during the past year have been very satisfactory, interruption from falling timber and other causes being infrequent; business was handled with a minimum of delay. General repair gangs were sent out from Ashcroft, Quesnel, Telegraph Creek, Whitehorse and Dawson; the right of way widened; menacing timber felled, and poles reset and renewed where necessary.

As will be noticed in the comparative statement accompanying this report, there has been a decrease in revenue at offices on the Atlin-Boundary division, notably at Dawson, Conrad and Atlin, which is attributed to the depression in the mining industry, and the consequent suspension of operations, followed by the departure from these districts of persons engaged in this work; but confidence is felt in the early revival of this industry and the resumption of mining operations in these camps on a more extensive scale.

The influx of settlers and prospectors to the Nechacco and Bulkley valleys is increasing; and the revenue at offices between Quesnel and Hazelton shows a substan-

tial increase, which should continue from year to year, pending the completion of the Grand Trunk Pacific Railway.

Horsefly Branch.—The assistance of an extra man for a week, on each section, during the month of July served to place this line in good repair. At Bullion, where the Guggenheim interests were operating, the extensive development work which they had undertaken was closed down, and a consequent decrease in revenue is shown at that office.

Barkerville Branch.—A general repair gang was employed for two months in resetting and renewing poles and generally overhauling this line, which is now in good order. Intermediate points such as Stanley, Cottonwood and Wingdam should have communication with Quesnel and Barkerville; but the revenue will not warrant the employment of operators at these points; it is therefore proposed to install telephone offices on a commission basis, attaching the telephones to the telegraph wire, and using condensers to overcome interference with the telegraph, in the same manner as prevails on the Prince Rupert section.

Port Simpson Branch and Prince Rupert Extension.—Traffic on this branch shows a general increase, mainly due to the extension of the line from Aberdeen to Prince Rupert. A decrease is shown at Port Simpson, but this is due to the fact that business for Prince Rupert was sent to Port Simpson, previous to the opening of an office at Prince Rupert. Instructions having been received to proceed with the extension of the line from Aberdeen to Prince Rupert—forty miles in length—construction was commenced May 1, and completed July 20, 1907.

Telephones were installed at Cassiar, North Pacific and Inverness Canneries *en route*, and the line operated as a composite telephone and telegraph, giving general satisfaction. Owing to the operation of the Grand Trunk Pacific Railway survey parties, locating along the river, interruptions from falling timber were frequent during the months of November and December; and, with commencement of construction from Prince Rupert eastward early next spring, it is expected that considerable difficulty will be experienced in maintaining communication, as the line and railway run together for the greater part of 100 miles, through a heavily timbered country, with rocky bluffs that rise sheer from the water to a great height, and in places impossible to cover on foot, canoes being necessary to get from one point to another. The work of repairing is, therefore, both difficult and dangerous. At Kitsumkalum, a point midway between Kitselas and Graveyard point, an office was opened for the accommodation of about thirty settlers, who had taken up land in that vicinity. Land along the river is being rapidly taken up for settlement, and several new offices will require to be opened next season.

This line will require to be reconstructed next season, as no work of general nature has been done on it since its construction in 1901, and the poles are decaying rapidly. An appropriation has been asked for this work, and, if granted, work will begin as soon as navigation on the river will permit.

Livingstone Creek Branch, Hootalinqua to Livingstone Creek.—An appropriation having been obtained for the construction of the line—approximately 35 miles in length—work was commenced on August 11 and completed September 13, 1907. Telephones were installed at Hootalinqua, Mason's Landing and Livingstone Creek, and the line is being operated as a telephone line exclusively.

I have the honour to be, sir,
Your obedient servant,

(Sgd.) J. T. PHELAN,
Superintendent.

YUKON TELEGRAPHS.

STATEMENT of business for 12 months ending March 31, 1907 as compared with 12 months ending March 31, 1908.

OFFICES.	1906 1907.			1907–1908.			MESSAGES.				REVENUE.	
	Messages.		Revenue.	Messages.		Revenue.	Increase.		Decrease.		Increase.	Decrease.
	Sent.	Received.		Sent.	Received.		Sent.	Rece'd.	Sent.	Rece'd.		
			$ cts.			$ cts.					$ cts.	$ cts.
Ashcroft B.C.	11,372	14,057	16,849 36	10,667	13,825	16,558 76			705	232		290 60
Aldermere "	473	424	631 80	748	722	992 64	275	298			360 84	
Alexandria "	130	122	47 88	149	116	45 05	19			6		2 83
Atlin "	1,358	1,254	3,318 49	928	800	2,670 67			430	454		647 82
Big Salmon, Y.T	57	17	56 42	26	16	53 69			31	1		2 73
Blackwater, B.C.	13	23	8 55	69	50	51 15	56	27			42 60	
Bobtail Lake, "	22	16	15 65	26	19	25 48	4	3			9 83	
Bonaparte, "	81	65	34 00	103	82	55 94	22	17			21 94	
Boundary, Y.T.	3,685	3,323		3,125	2,595				560	728		
Burns' Lake, B.C.	27	24	12 01	32	33	28 41	5	9			16 40	
Carcross, Y.T.	773	741	1,012 43	328	317	187 75			445	421		824 68
Centre Cabin, Y.T	1	2	1 15						1	2		1 15
Clinton, B.C.	964	933	436 06	888	759	421 59			76	174		14 47
Coffee Creek, Y.T.	99	60	141 96	77	63	76 87		3	22			65 09
Conrad, Y.T.	682	588	1,097 30	104	135	208 16			578	453		289 14
Dawson "	9,701	9,657	47,942 61	8,023	7,936	39,427 90			1,678	1,721		8,514 71
Echo Lake, B.C.	3	1	3 10	10	8	2 28	7	7				0 82
Eighth Cabin "	2	1	1 00	1	1	2 50			1		1 50	
Fifth Cabin "	7	4	6 55	4	3	4 01			3	1		2 54
First Cabin "	7	9	11 86	20	25	22 74	13	16			10 88	
Fort Selkirk, Y.T.	207	147	265 56	213	137	264 62	6			10		0 94
Forty Mile "	924	674	945 62	761	496	866 32			163	178		79 30
Fourth Cabin, B.C.	18	9	19 21	18	17	19 86		8			0 65	
Fraser Lake "	224	208	294 15	396	350	518 61	172	142			224 48	
Hazelton, "	1,129	1,142	1,434 74	1,566	1,635	2,026 20	437	493			591 46	
Hootalinqua, Y.T.	110	73	98 17	78	54	120 79			32	19	22 62	
Iskoot, B.C.	2		2 16	12	4	43 89	10	4			41 73	
Lower Labarge, Y.T.	93	99	120 31	113	114	171 09	20	15			50 78	
Moricetown, B.C.	16	12	12 22	42	26	26 87	26	14			14 65	
Nahlin, B.C.	6	4	7 28	10	9	15 43	4	5			8 15	

Nakina "	6	7	5 87	5	3	1 56			1	4		4 31
Ninth Cabin, B.C	1	1		1	2							
Ogilvie, Y.T	68	61	28 63	31	29	15 15			37	32		13 48
115 Mile House, B.C	365	250	143 90	346	256	155 37		6	19		11 47	
150 " "	1,054	1,003	517 18	886	918	465 29			168	85		51 89
Pike River, B.C	1	1							1	1		
Quesnel "	1,083	1,091	845 70	1,361	1,298	1,061 87	278	207			216 17	
Raspberry Creek, B.C	1	1	2 24	1		0 25			1			1 99
Second Cabin, B.C	5	5	1 00	8	6	9 83	3	1			8 83	
Seventh Cabin "	1		2 00	9	9	15 10	8	9			13 10	
Shesley, B.C	19	12	6 00	32	17	38 86	13	5			32 86	
Sixth Cabin B.C	1	1		4	3	4 53	3	2			4 53	
Soda Creek "	518	438	262 51	384	315	168 57			134	123		93 94
South Bulkley "	16	14	23 00	10	9	13 01			6	5		9 99
Stewart River Y.T	88	67	113 90	92	51	96 42	4			16		17 48
Stoney Creek, B.C	71	67	70 60	209	184	251 58	138	117			180 98	
Tagish, Y.T	15	14	12 94	15	13	10 74				1		2 20
Tantalus, Y.T	152	102	98 68	128	97	124 56			24	5	25 88	
Telegraph Creek, B.C	236	198	590 24	272	285	746 46	36	87			156 22	
Third Cabin "	2	4	1 03	3	4	0 50	1					0 53
25 Mile Cabin "				6	2	2 25	3	2			2 25	
White Horse, Y.T	2,540	2,626	4,890 20	2,616	2,415	5,036 19	76			211	145 99	
Yukon Crossing, Y.T	138	117	148 19	124	82	170 95			14	35	22 76	
Totals	38,567	39,769	82,591 39	35,080	36,345	73,298 31	1,642	1,498	5,129	4,922	2,239 55	11,532 63

PRINCE RUPERT EXTENSION AND PORT SIMPSON BRANCH.

Aberdeen, B.C	1,003	883	1,471 53	1,416	1,308	2,046 05	413	425			574 52	
Cassiar "				21	23	44 91	21	23			44 91	
Graveyard Pt., B.C	59	15	39 23	73	47	50 69	14	32			11 46	
Lorne Creek "	160	99	101 53	147	95	87 37			13	4		14 16
Meanskinisht "	155	139	97 38	174	175	52 53	19	36				44 85
North Pacific "				26	7	56 41	26	7			56 41	
Port Simpson "	1,076	877	1,678 79	941	829	1,241 29			135	48		437 50
Prince Rupert "				688	479	1,297 46	688	479			1,297 46	
Kitselas "	278	184	222 56	752	550	778 58	474	366			556 02	
Kitsumkalum "				148	68	152 46	148	68			152 46	
Telegraph Pt. "	7	5	4 66	24	10	25 47	17	5			20 81	
Totals	2,738	2,202	3,615 68	4,410	3,591	5,833 22	1,820	1,441	148	52	2,714 05	496 51

YUKON TELEGRAPHS—*Concluded.*

STATEMENT of Business for Twelve Months ending March 31, 1907, as compared, &c.—*Concluded.*

HORSEFLY BRANCH.

OFFICE.	1906-1907.			1907 1908.			MESSAGES.				REVENUE.	
	Messsges.		Revenue.	Messages.		Revenue.	Increase.		Decrease.		Increase.	Decrease.
	Sent.	Received.		Sent.	Received.		Sent.	Rec'd.	Sent.	Rec'd.		
			$ cts.			$ cts.					$ cts.	$ cts.
Bullion, B.C.	928	739	1,225 52	646	497	1,120 79			282	242		104 73
Harper's Camp, B.C.	247	189	151 62	250	192	120 35	3	3				31 27
Quesnel Forks "	737	565	465 41	520	405	334 53			217	100		130 88
Totals	1,912	1,493	1,842 55	1,416	1,154	1,575 67	3	3	499	342		266 88

BARKERVILLE BRANCH.

Barkerville, B.C.	1,005	1,023	1,001 08	999	893	819 71			6	124		181 37
Lafontaine "	93	71	31 31	40	41	12 41			53	30		18 90
Totals	1,098	1,094	1,032 39	1,039	940	832 12			59	154		200 27

LILLOOET BRANCH.

Lillooet, B.C.	459	475	380 01	239	263	156 07			220	212		223 94
Pavilion "	56	56	34 64	56	61	29 00		5				5 64
Totals	515	531	414 65	295	324	185 07		5	220	212		229 58

LIVINGSTONE CREEK BRANCH.

Livingstone Creek, Y.T.				65	48	147 85	65	48			147 85		
Mason's Landing "				2	2		2	2					
Totals				67	50	147 85	67	50			147 85		

SUMMARY—Total decrease of Revenue ..... $ 7,624 48
" "Sent" Messages ..... No. 2,523
" "Received" Messages ..... " 2,685

VANCOUVER, B.C.,
December 5, 1908.

J. T. PHELAN,
Superintendent.

REPORT No. 12.

OFFICE OF THE INSPECTOR YUKON TELEGRAPHS,
OTTAWA, January 14, 1908.

D. H. KEELY, Esq.,
General Superintendent,
Dominion Government Telegraphs, Ottawa.

SIR,—I beg leave to transmit herewith my report covering an inspection of the Dominion government telegraphs, north from Telegraph Creek, B.C., to Whitehorse, Y.T., which is in continuation of my previous reports:—

Telegraph Creek to Atlin, B.C., 1873 miles.—Telegraph Creek is situated on the left bank of the Stickine river, about 110 miles from the international boundary, and 140 miles from its mouth. The Stickine river has its source in the southern part of the Cassiar district and runs a distance of nearly 130 miles up to the 58th parallel, where it suddenly makes a sharp bend, then turns almost due south to within 20 miles of its mouth, a distance of 150 miles. From that point it runs in a westerly direction and empties into the Pacific ocean between the islands of Wrangel and Mitkof. The total length of the river is, approximately, 300 miles; its width for the first 25 miles varies from 2½ miles to 500 feet. The main obstructions to navigation consist of snags and large trees overhanging its banks. It is navigable for boats of the stern-wheel pattern for a distance of about 150 miles from its mouth.

Telegraph Creek is a small trading post containing two stores, a telegraph office and a few dwellings. The telegraph line crosses the river about two miles above, then follows the river down to the village.

Following is the average yearly cost to the department of maintaining our office at this point:—

	Salary.	Living Allowance.	Total.
	$ cts.	$ cts.	$ cts.
A. S. Gillispie, manager and operator	1,200 00	365 00	1,565 00
A. J. Charleson, line foreman	1,800 00	365 00	2,165 00
W. J. Simpson, lineman	900 00	365 00	1,265 00
Rent			120 00
Sundries			813 00
			5,928 00

Telegraph Creek to Shesley Station, 38·6 miles.—A. Johnson, operator and lineman at Shesley; salary, $82.50 per month and provisions.

The country traversed by the telegraph line, for a distance of about eight miles from Telegraph Creek, is of a gently rolling nature, ascending slowly to the first summit north of the Stickine river. It is only fairly wooded. The line follows Telegraph creek, after which the settlement is named. From this point the line runs through a fairly level country, covered with dead, dried and burnt spruce, until it reaches the valley of the first summit, whence it drops into the valley of the Little Tahltan river, which it follows for some seven miles, then the north shore of Big lake to the Little Salmon river and on to Shesley Station; country is still of the same nature, covered with dried and burnt spruce, balsam and jackpine.

There are 657 tree poles and 411 planted poles on this section. The line is in very good condition.

The cost to the department of maintaining this office for the past eight months was $1,072 80, made up as follows:—

Operator	$ 660 00
Sundries, provisions, packing, &c	412 83
	$1,072 83

Shesley Station to Nahlin, 47 miles.—J. Pilling, operator and lineman at Nahlin station; salary, $82.50 per month and provisions.

From Shesley, the line ascends to the Shesley summit. This summit is very sparsely wooded, although a sufficient quantity of trees are found suitable for telegraph poles. After crossing this summit, which is almost two miles high, the line drops down to the valley of the Dudedonte river, which it flows for about three miles when it rises again to a small ridge and comes down to Cache Creek. A series of small lakes dot the whole distance, and the ground is very marshy. From Shesley the line generally follows what is known locally as the south ridge of the Level mountains. The line crosses Cache creek and goes in an almost northerly direction. A fire swept this section of the country in the spring of 1898, and cleared the whole of the underbrush, leaving only the most dreary-appearing burnt standing timber with not a speck of verdure in miles upon miles of country. The trail was built by the Hudson Bay Company in 1891 and repaired by Messrs. McKenzie & Mann in 1898. Numberless sections of the corduroying have become so rotten that it is absolutely impossible to cross over them, so dangerous are they, and long detours have to be made to get around the swamps and muskegs. From this point, about 15 miles from Nahlin station, the timber becomes greener and larger, although consisting mainly of willows and poplars.

There are 909 planted poles and 413 tree poles on this section. The line is in good condition and the right of way absolutely clear.

The cost to the department of maintaining the Nahlin office for the past nine months was $1,987.85, made up as follows:—

Operator	$ 742 50
Relieving lineman	150 00
Lineman	675 00
Sundries, provisions, packing, &c	420 35
	$1,987 85

Nahlin Station to Nakina, 46·5 miles.—Geo. Coutts, operator at Nakina; salary $82.50 per month, with provisions. J. Huston, lineman; salary, $75 and provisions.

From Nahlin, the line follows the same sort of country until it reaches the Sisstah-tooet river, which it follows as far as the 'half-way,' north of Nahlin, from which point the country become much worse, being only successions of swamps and muskegs. The timber is a little larger and greener. Practically all the way from Nahlin to Nakina the line traverses the same sort of country until it drops into the valley of the Little Nakina, whence it ascends towards the Nakina summit, where it again enters the burnt-out area. After crossing the Nakina summit the line drops down to the Nakina river and station. This station is at the bottom of a wedge-shaped ravine of great depth, as it is about two and a half miles down one side and three miles up on the other, while the whole distance across is barely two miles.

There are 604 planted poles and 832 tree poles on this section. Line is in good shape.

The cost to the department of maintaining the Nakina office during the past nine months was $1,822.29, made up as follows:—

Operator	$ 742 50
Lineman	675 00
Sundries, provisions, packing, &c	409 79
	$1,822 29

Nakina to Pike River 36·8 miles.—From Nakina the line runs up the north side of the canyon and is in very good condition, although the country is very rough and wet as far as the north half-way when it drops into the valley of the Silver Salmon, where the ground becomes drier and the timber improves in quality. From this point to Pike river, where the line touches Atlin lake, the country is much easier to travel over, it being drier and more level.

There are 1,102 tree poles and 99 planted poles on this section. Line is in very good condition.

Pike River is only a winter office, it being used as a refuge during the summer months.

Pike River to Atlin, 18·4 miles.—The line follows the east shore of Lake Atlin from Pike river to Atlin. The shores of the lake are very rocky, making the travel very rough.

There are 687 tree poles and 49 planted poles on this stretch. Line is in good condition.

Atlin to Whitehorse	117·85	miles.
Cariboo Branch	23·3	"
Conrad Loop	12·5	"

Atlin.—Atlin is one of the principal stations on the Yukon telegraph system, and is the focus of this district. It is beautifully situated on rising ground, on the eastern side of the lake, one mile and a half north of the mouth of Pine creek. Facing it, from the opposite side of the lake, are the snow-capped Atlin mountains. Atlin district is situated in the extreme north of the province of British Columbia. Lying in the middle of the district, in a north and south postion, is Atlin lake, into which all the principal creeks flow, and of which the outlet is the Atlinto river, which empties into Taku, an arm of Lake Tagish, thus it is that the Atlin district drains north and eventually into the Yukon river. The country is mountainous, with many peaks above the snow line. All of the creeks are bordered by hills which are thickly wooded upwards for a considerable distance with pine, jackpine, spruce and poplar. Though these trees are in many instances small, large trees also abound. Good fish are caught in the lake, trout, whitefish and grayling being the ordinary varieties. Some of the trout are very large, weighing as much as twenty pounds. The chief wealth of the district, however, is in its minerals, gold being the principal metal found.

This district is supposed to have been uninhabited, prior to the coming of the prospectors in 1898, although old sluice boxes have been found which indicate that the region was visited in earlier years. Authentic records begin in 1898, as stated above, when a man named Miller staked 'Discovery' on Pine creek, which soon becoming known, caused a stampede from the Klondike and other places. The greater rush took place in 1899, when some five or six thousand people pitched their tents on the town site. Owing to some doubt as to whether Atlin was in British Columbia or the Northwest Territories, and difference in the mining laws in these two provinces, joined with the Alien Act which came in force in January, 1899, giving a chance for claim jumping, the population rapidly diminished, only those remaining

who had found employment, so that in the summer of 1901 there were but about 1,500 people in the whole district. In summer there is no difficulty whatever attending the trip into Atlin. The point of departure from the White Pass and Yukon Railway, is Cariboo Crossing, now known as Carcross, where connection is made twice a week with a sternwheel steamer which runs on Taku arm as far as Taku City. Two miles of railway joins Taku City and Scotia Bay, on Lake Atlin, where another steamer plies between Scotia Bay and Atlin City, the lake being crossed in about half an hour. Travelling in the district itself is very easy, the lakes and creeks being the natural highways. When navigation closes, Log Cabin on the White Pass and Yukon Railway becomes the divisional point and Atlin is reached by the Fantail route. The climate is good and the air is bracing. In summer, in the middle of the day it is quite hot. In winter the cold is not insupportable. Placer mining and hydraulicing are the modes of mining adopted on the creeks, the principal of which are Pine, Spruce, Willow, Birch, Boulder and McKee creeks. The first hydraulic plant was installed by the Atlin Lake Mining Company on Birch creek in 1899. Since that date, plants more or less complete have been installed by other companies which has almost entirely superseded the individual miner. The above description of this district, as to its physical features, apart from minerals, applies generally to that stretch of country between Nakina and Tagish.

In 1899, Atlin was connected with Dawson by wire, and in the spring of 1900 the construction of the telegraph line was proceeded with, so that in September, 1901, an all-Canadian telegraph service was established from Asheroft ,B.C., to Dawson and onwards to the northern international boundary.

The following is the average yearly cost to the department of maintaining an office at this point:—

F. W. Dowling, services and board allowance	$1,872 00
A. B. Taylor, night operator	1,680 00
Messenger	22 00
H. D. Gagné, lineman	968 00
Sundries, provisions, &c.	428 13
	$4,970 13

Atlin is a relaying and repeating station, a set of Weiny-Philip repeaters being installed here. The main battery is composed of 219 cells, 154 north and 65 south, with an additional 23 on the repeaters.

A complete meteorological record of the weather conditions in the district is kept and complete returns made monthly.

Atlin to Centre Cabin, 35·5 miles.—From Atlin to Centre Cabin the line still follows the east shore of Lake Atlin, the contour of which becomes rougher and the country more broken. The right of way has not been 'brushed' making the travelling much harder. Construction might easily have been better as the line in following the sinuosities of the lake shore winds in and out and almost doubles on itself at several places. The timber along the east shore of the lake from Atlin is mostly composed of cottonwood and poplar.

There are 998 tree poles and 42 planted poles on this stretch. Line is in very good condition.

Centre Cabin to Tagish, 31·85 miles.—From Centre Cabin, the line strikes off in a northwesterly direction across a neck of land between Little Atlin and Atlin lakes which are joined by the most tortuous stream in the world, the Lubbock river, which is about 40 miles long while the distance between the two lakes is only about nine miles. The line is very crooked along here while it could have been built in a perfectly straight line. The country is very level with few marshes.

From the first refuge north of Centre Cabin, the line follows the southern shore of Little Atlin lake for a distance of about ten miles, then crosses in a straight line to Tagish which is situated at the lower end of Tagish lake.

There are 747 tree poles and 231 planted poles on this stretch.

Tagish to Cariboo Crossing, 23·3 miles.—Tagish is the junction point where the branch line to Cariboo Crossing joins the main line. The line crosses to the south bank, 800 feet from the station, and following the south shore of Lakes Tagish and Nares reaches Cariboo Crossing which is a divisional point on the White Pass & Yukon Railway.

There are 727 poles from Tagish to Cariboo Crossing and the line is in very good condition.

Following is the average yearly cost to the department of maintaining the Tagish office:—

Operator	$ 990 00
Relieving operator	34 60
Lineman	900 00
Sundries, provisions, &c.	434 93
	$2,359 53

The completion of the White Pass & Yukon Railway from Cariboo to Whitehorse, running through the Watson Valley, in an almost straight line, instead of following the shores of the lakes and rivers, completely cut Tagish out of the line of travel. Further, it caused nearly all the steamers which were plying on the lake between Bennett and Miles Canyon to be taken through the Canyon and Whitehorse rapids, and they are now being operated on the Yukon river between Whitehorse and Dawson.

Cariboo Crossing.—As stated above, Cariboo Crossing is a divisional point on the White Pass & Yukon Railway and was originally a station on our main line between Bennett and Dawson, but after the railway was extended from Bennett to Cariboo, Bennett became totally deserted and it was found advisable to abandon that stretch of line from Bennett to Cariboo.

The cost to the department of maintaining the Cariboo office was, for the past nine months, $1,263.90, made up as follows:—

Operator	$ 742 50
Sundries, provisions, &c.	521 40
	$1,263 90

Cariboo Crossing to Conrad City, 12½ miles.—In 1905 a loop line 12½ miles in length was built from Cariboo Crossing to Conrad City, following the north shore of Lake Tagish and along Windy Arm to Conrad; this was to accommodate the business men of Conrad City, and was opened as a telegraph office on the 12th of October, 1905. An arrangement was made with the Conrad Mining Company whereby they were to board our operator at their mess house, free of charge, but owing to the closing of their mess house in 1907, this arrangement was cancelled and in consequence a telephone system was substituted and the office was placed on a commission basis, 25 per cent of our line tolls being allowed the agent for his services.

Tagish to Whitehorse, 50·5 miles.—From Tagish, the line follows the south shore of Lake March and the southern bank of the Lewes river as far as Whitehorse. The line on this stretch is in very good condition and well cared for. Interruptions on

this stretch are of very rare occurrence. There are 1,484 poles between Tagish and Whitehorse.

Distances.

	Miles.
Telegraph Creek to Shesley station	38·6
Shesley to Nahlin	47
Nahlin to Nakina	46·5
Nakina to Pike River	36·8
Pike river to Atlin	18·4
Atlin to Centre Cabin	35·5
Centre Cabin to Tagish	31·85
Tagish to Whitehorse	50·5
Cariboo-Conrad loop	12·5
Tagish-Cariboo branch	23·3
Total distance Telegraph Creek to Whitehorse, including branches	340·95

Refuge Houses.

There are four refuge houses between Telegraph Creek and Shesley Station, distance, one from the other, as follows:—

	Miles.
Quarter-way from Telegraph Creek	8
Twin Creek distant from Quarter-way	6·1
Half-way distant from Twin Creek	5·8
Fourth, Salmon Cr. distant from Half-way	9·4
Shesley Station distant from 4th refuge	9·3
	38·6

Refuges between Shesley Station and Nahlin.

	Miles.
Shesley to 1st refuge	10·7
1st refuge to Half-way	15·4
Half-way to 3rd refuge	5.6
3rd refuge to 4th refuge	8·6
4th refuge to Nahlin	6·7
	47

Refuges between Nahlin and Nakina.

	Miles.
Nahlin to 1st refuge	5·3
1st refuge to 2nd	4·6
2nd refuge to Half-way (3rd)	13·3
Half-way to 4th refuge	8.8
4th refuge to 5th refuge	7·4
5th refuge to Nakina	7·1
	46·5

Refuges between Nakina and Pike River.

	Miles.
Nakina to 1st refuge	8·9
1st refuge to Half-way	8·6
Half-way to 3rd refuge	8·5
3rd refuge to Pike River	10·8
	36·8

There are no refuges between Pike river and Atlin, testing poles only being required.

There are, also, no refuges between Atlin and Centre Cabin, a distance of 35·5 miles, different buildings being used but testing poles are located every seven or eight miles.

Refuges between Centre Cabin and Tagish.

	Miles.
Centre Cabin to 1st refuge	3.32
1st refuge to 2nd refuge	8·19
2nd refuge to Tagish	20·14
	31·65

Between Tagish and Cariboo Crossing, and Tagish and Whitehorse, testing poles only are used, these being located at convenient distances.

These refuges, as the name implies, are used by the linemen for shelters when out on line work. They are simply square log huts into which the wire is 'cut-in' for testing purposes.

Poles—Telegraph Creek to Whitehorse.

	Tree Poles.	Planted Poles.
Telegraph Creek to Shesley	657	411
Shesley to Nakina	413	909
Nakina to Nahlin	832	604
Nahlin to Pike River	1,102	99
Pike River to Atlin	687	49
Atlin to Centre Cabin	998	42
Centre Cabin to Tagish	747	231
Tagish to Cariboo	277	410
Tagish to Whitehorse	491	993
Totals	6,204	3,748

These poles are all unpeeled fir, jackpine, black pine and spruce. Along the eastern shore of Lake Atlin considerable cottonwood has been used.

Supplies.

All the supplies for the stations north of Telegraph Creek to Pike river, including Telegraph Creek, are bought in Vancouver, landed at Telegraph Creek and handed over to the packing firm of J. F. Callbreath who has our contract for packing.

At Atlin, the men are living on board allowance. Tagish is provisioned from Vancouver, as well as Cariboo, generally.

From Telegraph Creek to Whitehorse is the easiest part of our system to keep up, owing to the more favourable country it traverses and the line is in first-class condition, interruptions being of rare occurrence.

The map accompanying this report (not published) shows the telegraph line, telegraph offices along same, refuge houses, kind of timber growing in the neighborhood, hilly or level country, and all information which it was thought might be of use to the department. Distances given along the telegraph line are absolutely accurate, as the whole was chained during the course of the inspection.

I have the honour to be, sir,
Your obedient servant,

J. E. GOBEIL,
General Inspector, Yukon Telegraphs.

REPORT No. 13.

HALIFAX, September 30, 1908.

D. H. KEELEY, Esq.,
General Superintendent,
Ottawa, Ont.

DEAR SIR,—In addition to the separate report on each repair done by the *Tyrian* during the season of 1907, the following is a statement of the amount of cable handled, with the dates on which work was done.

Date.	——	Knots.	Knots.
1907.			
May 16....	*Deep sea cable* in tanks since last year		9·34
" 24....	Repairing Grand Manan, picked up		
" 24....	" " laid down	2·93	
July 10....	" Magdalen Islands cable, picked up		4·00
" 10....	" " " laid down	2·53	
" 13....	" Scatarie cable, laid down	·50	
" 22....	" Long Point, picked up		2·07
" 22....	" " laid down	2·74	
Aug. 7....	" Crane Island, laid down	1·00	
" 17....	New cable to Port Hood Island, laid down	3·00	
" 23....	Picked up remainder of Bryon-Anticosti		32·59
Sept. 17....	Repairing L'Anse Gardien, laid down	·25	
" 17....	" Baie St. Paul "	·75	
" 21....	New cable, Grosse Isle to Crane Island	5·12	
" 21....	Recovered the old Crane Island cable	·18	
Oct. 1....	Shipped to Victoria, B.C.	5·00	
" 3....	Landed at St. John, Island of Orleans	1·00	
Nov. 21....	Total cable left in tank	23·00	
		48·00	48·00
July 18....	Laid the one knot section of *Twin Core cable* that was aboard from the inner Port Hood Island to the mainland.		
May 16....	*Shore End cable* in tanks since last year		1·57
	Picked up during the season		·50
Oct. 1....	Shipped to Victoria, B.C.	1·00	
" 15....	Laid at Big Bras d'Or	·50	
Nov. 21....	Total *Shore End* left in tank	·57	
		2·07	2·07

Respectfully submitted,
A. B. McDONALD,
Electrician.

PART VI

REPORT OF THE COLLECTOR OF REVENUE

DEPARTMENT OF PUBLIC WORKS.

1907-1908

DEPARTMENT OF PUBLIC WORKS,
COLLECTION OF REVENUE,
OTTAWA, July 13, 1908.

NAPOLEON TESSIER, Esq.,
Secretary, Department of Public Works,
Ottawa, Ont.

SIR,—I have the honour of submitting my report for the fiscal year ending March 31, 1908.

I have examined the books and accounts of the officers under my control for the period ended March 31, 1907, and find that they had faithfully accounted for all revenues coming to their hands.

Other pressing duties have prevented me from performing this duty for the last fiscal year.

During the year just closed, the revenue accrued from public works and properties shows an increase of $48,827.81, being $175,217.09, while in the preceding period they amounted to $126,389.28.

The collections likewise show an increase of $43,000.86, being $167,058.33, while in the preceding year they were $124,057.47.

Revenue accrued from slides and booms was $94,293.53, or $5,151.74 more than the preceding financial period.

The collections were $86,760.67, or $77.31 less than previous term.

The outstanding uncollected revenue was increased by $7,532.86 (of which $2,587.75 has since been collected).

The graving docks yielded $63,208.58, or $32,555.79 more than the previous financial term.

Rents amounted to $17,714.98, being an increase of $11,125.28.

Having dealt with the revenue in a general way, I now submit particulars in detail relative to the several services under their respective heads.

SLIDES AND BOOMS.

OTTAWA DISTRICT.

The tolls charged up amounted to $45,150.46; $1,303.56 more than in 1906-7.

The number of saw-logs that passed through the works was 4,487,161 pieces, or 302,043 pieces more than the preceding year.

There was no square timber whatever brought through the works during the past year, and but 24 cribs of flatted timber used the slides.

Of the revenue accrued during the year, $5,541.72 was uncollected on March 31 last, of which, however $2,389.32 has since been paid, and $3.29 of dues of 1906-7 was collected.

Of the dues accrued since July 1, 1889, when this department took over the collection, there was uncollected $13,687.07, particulars of which will be found in Statement No. 2 herewith.

Of dues accrued before July 1, 1889, there still remains $56,805.65, all of which should be written off. (See Statements Nos. 1 and 3 herewith for particulars.)

The accounts for the Otawa district stand thus:—

Dues accrued during the year ended March 31, 1908..	$45,150 46
Of which there has been collected..	39,612 03
Dues accrued prior to the collection being transferred to this department, July 1, 1889..	56,805 65
Dues of 1889-90..	6,903 05
" 1890-91..	28 47
" 1892-3..	379 80
" 1896-7..	196 71
" 1903-4..	637 37
" 1907-8..	5,541 72
Total uncollected..	70,492 72

Of the dues accrued since this department assumed collection, $967,454.92, at this date, all but $28.42 absolutely owing the department has been collected, the remained being items disputed and waiting departmental action.

The increases and decreases in the different works, as compared with the year 1906-7, were as follows:—

Increases—	
Main, Ottawa..	$ 107 94
Petawawa..	2,868 58
Gatineau..	287 33
Decreases—	
Cheneaux Boom..	581 98
Madawaska..	1,019 44
Coulonge..	224 00
Black River..	120 66
Dumoine..	14 21

Herewith are statements in detail:—

No. 1. Statement of amounts outstanding prior to July 1, 1889, uncollected March 31, 1908.

No. 2. Statement of dues accrued at Ottawa since July 1, 1889, uncollected March 31, 1908.

No. 3. Statement of amounts accrued at Quebec prior to July 1, 1889, uncollected March 31, 1908.

No. 4. Statement of the number of pieces of saw-logs, &c., which passed through the Ottawa works during the year ended March 31, 1908.

No. 5. Statement of dues accrued from each of the slides and works in the Ottawa district during the year ended March 31, 1908.

ST. MAURICE DISTRICT.

The revenue from this district was $45,428.21, being $4,094.05 more than in 1906-7, and the largest in the history of the works.

The collections, including $5 dues of 1906, amounted to $45,433.21.

It is very gratifying to state that since I took charge of this district in 1892, every cent of dues accrued has been collected.

The number of pieces of all kinds of timber that passed through the works was equivalent to 4,222,128 saw and pulp logs.

The amount outstanding prior to July 1, 1892, remains at the same figure, viz., $14,486.49, which should all be written off for reasons assigned in Statement No. 6, herewith.

For various reasons the cut in the St. Maurice district last winter was considerably restricted, and as the demand for pulpwood has fallen off greatly, unless a decided change soon takes place in the latter respect, I fear there will be a large reduction in the revenue during the current year.

I have for several years advocated the advisability of providing storage dams at the head waters of the St. Maurice, but I now understand that some of the power and manufacturing concerns are making some progress in this direction.

The opening of the current season was rather unfortunate, as the booms at Three Rivers were carried away by the ice coming after they were set and caused considerable expense in replacing them, while at Grand Mère, where the booms had been left out all winter, as they had been for several years past, an immense jam of ice almost completely swept them away, but they have been recovered and replaced in their former position.

The loss by logs going out to the St. Lawrence was somewhat heavy, but not nearly so great as at first supposed; all told, I believe less than 40,000 pieces went out.

NEWCASTLE DISTRICT.

The dues accrued from this district amounted to $1,913.86, an increase of $243.65.

The tolls outstanding on March 31, 1908, amounted to $3,755.32 of which $198.43 has been since paid; $3,521.19 should be written off in accordance with a judgment of the Exchequer Court; $35.70 will also have to be written off, the debtor being a very old man, hopelessly insolvent. Full particulars of amounts outstanding will be found in Statement No. 7, herewith.

Some changes in the work at Burleigh Falls last year have proved quite a benefit to the lumbermen in passing their logs through this point.

The high water this year has caused considerable damage, which should be repaired as soon as the water falls sufficiently.

At Fenelon Falls considerable repairs are also needed, which, however, cannot be made till the water is much lower than at present.

SAGUENAY DISTRICT.

The revenue accrued during the past fiscal year was $1,801, which, with the dues charged last year, remain uncollected.

The company is still contesting the right of the department to collect for the year 1906, and as the amount they should pay for 1907 has not yet been determined, the company being liable for maintenance, which far exceeds the $1,801 for tolls, these accounts are in a very unsatisfactory condition.

Statement No. 8, herewith, shows the particulars of the revenue from this district.

GRAVING DOCKS.

ESQUIMALT GRAVING DOCK.

The revenue from this service was $29,760.20, the largest in the history of the works, and $10,183.16 more than the previous year. The dock was used for 195 days by 20 ships having a gross tonnage of 75,904 tons.

For full details see Statement No. 9, herewith.

To meet present conditions the regulations have been revised and approved by order in council of June 19, 1908.

LÉVIS GRAVING DOCK.

The revenue was $17,692.67 more than in 1906-7, being $24,352.49. (See Statement No. 10.)

The dock was occupied for 220 days by 17 vessels of 32,635 tons in all. Steamers *Strathcona* and *Druid* and dredge *Progress* occupied the dock during the winter of 1906-7; during the past winter it was occupied by steamers *Quebec, Montcalm, Lady Eileen* and *J. G. Witherbee*.

KINGSTON GRAVING DOCK.

This dock was occupied for 129 days of season of navigation by 52 vessels, measuring 31,005 tons.

It was occupied during the winter season by steamer *Saginaw* and barge *Ungava*. (See Statement No. 11.)

RENTS.

The rents accrued during the year amounted to $17,714.98, being $11,125.28 more than the previous year; $611.40 was outstanding on March 31, 1908, about half of which amount is Sussex street rents disputed, much of the balance being owing by poor people to whom these properties were rented by the former owners, and it was not considered advisable to eject them so long as they make some effort, as they are doing, to pay up the rent.

One thousand four hundred and sixty-nine dollars and sixty-six cents was collected from tenants of property purchased for the examining warehouse, Montreal. Full particulars of amounts collected appear in the list hereunder.

Property or Privilege Rented.	Rent Collected.
Sussex street property, Ottawa, Ont.	$10,666 42
Old post office building, Victoria, B.C.	4,158 00
Examining warehouse site, Montreal, P.Q.	1,469 66
Portion graving dock premises, Kingston, Ont.	250 00
Reserve, east side, St. Maurice river.	50 00
Part reserve, Victoria island, Ottawa, Ont.	2 00
Privilege of erecting towers on beach, Burlington channel	1 00
Island and water power, Calumet channel, P.Q.	25 00
Part reserve, Pond Creek, P.Q.	1 00
Part reserve, west side, Black river.	25 00
Ile Caron, P.Q.	75 00
Tramway on Goderich breakwater, Ont.	5 00
Part public building, Drummondville, P.Q.	176 00
Old Government House, Yale, B.C.	5 00
Privilege water pipe connection, William Head, B.C.	12 00
Portion immigration building, Port Arthur, Ont.	165 00
Privilege laying tracks on bridge near Edmonton.	1 00
Toronto Island, portion of.	1 00
Kingston, piece of land on Clarence street.	1 00
	$17,089 08

The following table of the Public Works revenue accrued during the fiscal year ending March 31, 1908, compared with the revenue during the fiscal period ended March 31, 1907, shows at a glance in what accounts increases and decreases herein reported have occurred:—

—	Year ended March 31, 1908.	9 mos. ended March 31, 1907.	Increase, 1908.	Decrease, 1908.
Slides and Booms.	$ cts.	$ cts.	$ cts.	$ cts.
Ottawa District	45,150 46	43,846 90	1,303 56	
St. Maurice District	45,428 21	41,334 16	4,094 05	
Newcastle District	1,913 86	1,670 21	243 65	
Saguenay District	1,801 00	2,290 52	.....	489 52
	94,293 53	89,141 79	5,641 26	489 52
Net increase $5,151.74.				
Graving Docks.				
Esquimalt, B.C	29,750 20	19,627 04	10,133 16	
Kingston, Ont	9,095 89	4,365 93	4,729 96	
Levis, Que	24,352 49	6,659 82	17,692 67	
	63,208 58	30,652 79	32,555 79	
Rents	17,714 98	6,589 70	11,125 28	

Total increase of dues accrued, 1907-8	$48,823 81
Collections, year ending March 31, 1908—	
From slides and booms	86,760 67
From graving docks	63,208 58
From rents	17,089 08
Total	$167,058 33
Increase in collections	$43,000 86

In conclusion I wish to acknowledge the uniform courtesy and cheerful assistance accorded me at all times by the officers with whom I have been brought in contact during the year.

I have the honour to be, respectfully, sir, your obedient servant,

EDWARD T. SMITH.

No 1.—STATEMENT of Slidage and Boomage from the Ottawa Slides and Works, accrued prior to July 1, 1889, Outstanding March 31, 1908, and remaining uncollected on June 30, 1908.

By whom due.	Bad and Doubtful Debts.	Chaudiere Boomage in Suspense.	Other Slide and Boom Dues Disputed.	Total Outstanding on Sept. 30, 1902.	Year to which Dues belong.	Remarks.
	$ cts.	$ cts.	$ cts.	$ cts.		
John & Wm. McLean	53 14			53 14	1873	Insolvent.
John Rowan	342 50			342 50	1872-1873	"
Lemieux & Charette	21 30			21 30	1873	"
Tallion & Lapierre	148 10			148 10	1873-1874	"
Mosgrove & McHarry	261 42			261 42	1873-1874	"
W. C. Wells	600 90			600 90	1873-1874	"
Dufresne & McGarity	528 80			528 80	1874-1875	"
Walton Smith	171 46			171 46	1874-1875	"
A. H. Baldwin	3,507 92			3,507 92	1871 to 1874	"
Hon. James Skead	9,807 65			9,807 65	1861, 1863, 1864, 1869, 1875 to 1878.	"
Batson & Currier	5,558 70			5,558 70	1875 to 1877	"
A. F. A. Knight	546 30			546 30	1878	"
James Walker	11 25			11 25	1877	"
R. Campbell & Son	1,558 50			1,558 50	1879 to 1881	"
James G. Bryson	73 50			73 50	1886	"
Costello Bros.	90 62			90 62	1882	"
N. E. Cormier	428 34			428 34	1888	"
James Yuhill	9 29			9 29	1876	Overcharge.
J. & B. Grier	76 84			76 84	1883	"
R. & W. Conroy	95 42			95 42	1882 1883	" reported in return S—38, for March, 1886.
A. P. White	101 00			101 00	1881	"
B. Caldwell & Son	4 33			1 33	1887	"
J. R. Booth		9,871 92	398 88	10,270 81	1881 to 1888	$398.88, counter claim for damages by the breaking of Coulonge Boom.
Perley & Pattee		8,889 85		8,889 85	1881 to 1888	
The Bronson & Weston Lumber Co.		8,180 79		8,180 79	1881 to 1888	
Pierce & Co		462 18		462 18	1888	
G. A. Grier & Co		1,060 59		1,060 59	1886-1887	*Chaudiere boomage. These parties claim that they have maintained these works wholly at their own expense since 1881.
Estate late Levi Young		1,461 20		1,461 20	1881 to 1885	
Wm. Mason		413 85		413 85	1881 to 1888	
Gilmour & Co		406 27		406 27	1884	
John Rochester		258 88		258 88	1881 to 1883	
J. & G. Bryson			252 20	252 20	1886	Counter claim for damages by breaking of Coulonge Works.
	23,997 28	31,006 54	651 08	55,653 90		

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

EDWARD T. SMITH,
Collector of Slide and Boom Dues.

No 2—Statement of Slide and Boom Dues accrued from the Ottawa River Works, since July 1, 1889, Outstanding on March 31, 1908.

Name.	Year to which Dues belong.	Chaudiere Boomage in Suspense.	Chenеaux Boomage.	Ordinary Dues.	Total.	Remarks.
		$ cts.	$ cts.	$ cts.	$ cts.	
J. R. Booth	1889-90	2,561 69			2,561 69	Chaudiere Boomage reported to Council and referred to Treasury Board, should be written off.
The Bronson & Weston Lumber Co.	1889-90	2,056 96			2,056 96	
Perley & Pattee	1889-90	1,203 26			1,203 26	
Wm. Mason & Sons	1889-90	167 66			167 66	
Pierce & Co	1889-90	913 48			913 48	
Alex. Fraser, acct. Thos. Stephens	1890-91			28 42	28 42	Legal action taken to recover this.
J. R. Booth	1892-93			379 80	379 80	Retained by Mr. Booth in settlement of account due him, which the Auditor General refused to pay as Mr. Booth appeared to be in arrears in this and Statement No. 1.
Bryson & Fraser	1896			196 71	196 71	Have counter claim for work done on Slide to this amount.
J. R. Booth	1903			339 27	339 27	Petewawa Slidage disputed.
Hawkesbury Lumber Co	1903			298 10	298 10	" " "
R. & T. Ritchie	1907		166 70	2,222 62	2,389 32	Paid June 30, 1908.
Hawkesbury Lumber Co.	1907		743 32		743 32	Claim for reduction before the department.
J. R. Booth	1907		1,912 41		1,912 41	" " " "
Shepard & Morse Lumber Co	1907		434 56		434 56	" " " "
Estate late R Hurdman	1907		62 11		62 11	" " " "
		6,903 05	3,319 10	3,464 92	13,687 07	

EDWARD T. SMITH,
Collector of Slide and Boom Dues.

Department of Public Works,
Ottawa, July 15, 1908.

No. 3.—STATEMENT of Outstanding Slide Dues, Otawa District, Bonds for which were sent to Quebec for Collection.

Name.	From 1860.	From 1861.	Total.
	$ cts.	$ cts.	$ cts.
Hon. James Skead	245 00	210 00	455 00
James Mair		696 75	696 75
	245 00	906 75	1,151 75

These amounts were uncollected, as the parties claimed damages for loss caused by the Madawaska boom breaking in 1860.

A decision on their claims was not arrived at till August 2, 1869. On the 5th idem, Messrs. Skead and Mair were notified that the department could not recognize their claim.

To the best of my knowledge, this decision was never communicated to the Collector of Slide Dues; consequently, these accounts remained in abeyance.

Since then, both parties died, and I believe both were insolvent at the time of their death.

EDWARD T. SMITH,
Collector of Slide and Boom Dues.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

No. 4.—STATEMENT of the number of pieces of square timber, saw-logs, &c., that passed through the government slides and works on the River Ottawa and its tributaries during the fiscal year ended March 31, 1908.

	Pieces.
Square timber	
Saw-logs	4,487,161
Boom and dimension timber	47,962
Cedars	31,546
Railroad ties	385,737
Fence posts	66,293
	5,018,699

Also 30,993⅛ cords pulpwood.
And 24 cribs flatted timber.
The revenue accrued on the above was $45,150.46.

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

No. 5.—STATEMENT showing the dues accrued on the under-mentioned works on the River Ottawa and its tributaries during the fiscal year ended March 31, 1908.

River or Other Improvement.	Amount.
Main Ottawa	2,206 92
Cheneaux Boom	6,685 56
River Petawawa	14,313 83
" Madawaska	474 12
" Coulonge	7,649 36
" Dumoine	173 18
Black River	5,996 61
River Gatineau	7,650 88
	$45,150 46

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

No. 6.—STATEMENT of Slide and Boom Dues from the St. Maurice Slides and Works outstanding on March 31, 1908, and remaining uncollected on June 30, 1908.

Name.	Year to which Dues belong.	Amount.	Total.	Remarks.
		$ cts.	$ cts.	
George Baptist, Son & Co.	1878	469 95		
" ..	1879	2,110 62		
" ..	1880	1,696 18		
" ..	1881	293 69		Have counter claims for damages to loss caused by the booms not being stretched early enough in the spring of 1878 to prevent the logs going over the chutes.
" ..	1882	165 80		
" ..	1884	118 50		
" ..	1888	4 28		
			4,859 02	The claims were submitted to Special Commissioner, Mr. McDougall, afterwards Judge, who, after hearing the evidence on both sides, recommended that the claims of the parties should be allowed.
Ross, Ritchie & Co	1878	3,072 84		
"	1883	2,173 68		
"	1884	28 96		
"	1886	1 62		
"	1887	4 38		
			5,281 48	
Alex. Baptist	1879		2,116 96	
Wm. Ritchie & Co	1888	779 24		
"	1889	332 11		
			1,111 35	Of this amount $754.20 is claimed to be an overcharge. Insolvent.
Ritchie Bros	1886	413 43		
"	1887	634 71		
			1,048 14	This amount is composed of overcharges in 1886 and 1887 of $442.76 and overpayment in 1884 of $205.38.
G. B. Hall	1890		49 34	Insolvent.
T. E. Normand	1890		42 28	Claims that this balance is an overcharge.
Treffle Biron	1891		0 92	Would cost more to collect than it is worth.
			*14,481 49	

* To make this balance agree with the Public Accounts, there should be deducted $7.93 over credited Alex. Baptist, and $217.17 added thereto, being $190.40 paid July 23, 1884, and $26.77 overcharged in error to Wm. Little, not in any of the collector's returns, which will give balance due September 30, 1894, of $14,690.73.

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

No. 7.—STATEMENT of Slides and Boom Dues accrued from the Newcastle and Trent River Works, outstanding on March 31, 1908.

Name.	Year to which Dues belong.	Amounts disputed.	Ordinary Dues.	Total.	Remarks.
		$ cts.	$ cts.	$ cts.	
Irwin & Boyd	1881	59 79		59 79	
Thomson & McArthur	1880	52 78		52 78	
Jabez Thurston	1882	12 50		12 50	Insolvent.
McDougall & Ludgate	1879	65 07		65 07	
Bigelow & Trounce	1882 to 1885	216 21		216 21	
R. G. Strickland	1882, '83, '85, '86 and '87	215 08		215 08	
Est. late Geo. Hillard	1877 to 1883 and 1886	354 15		354 15	Dead and estate distributed.
T. G. Hazlett	1881, '82, '84 to '89	885 25		885 25	
J. M. Irwin	1882, '83, '85 to '88	698 45		698 45	
D. Ullyot	1881 to 1887	547 68		547 68	According to judgment in Exchequer Court, *re* Boyd *vs.* Smith, these cannot be collected.
Green & Ellis	1881 to '83, '85, '88 and '89	157 01		157 01	
A. W. Parkin	1884, '85, '88, '90 and '91	65 92		65 92	
The Dickson Estate	1883	137 50		137 50	
Alfred McDonald	1888	40 80		40 80	
John Parkin	1889	13 00		13 00	
John Dovey	1894, '95, '96		35 70	35 70	Sent to Dept. of Justice for collection.
Baker Lumber Co	1907		198 43	198 43	Paid July 4, 1908.
		3,521 19	234 13	3,755 32	

EDWARD T. SMITH,
Collector Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

No. 8.—STATEMENT of Slide and Boom Dues from Saguenay Works, outstanding on March 31, 1908.

Name.	Year to which Dues belong.	Amount.	Remarks.
		$ cts.	
La Cie de Pulpe de Chicoutimi	1906, 1907	4,034 85	Disputed.
Jos. Vachon	1906	56 67	"
		4,091 52	

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

THE DRY DOCK AT ESQUIMALT.

No. 9.—STATEMENT of Dues and other charges collected during the year ending March 31, 1908.

Name of Vessel Docked.	Tonnage.	Period of Dockage.		Dockage Charges.	Other Charges.	Total.
		From.	To.			
		1907.	1907.	$ cts.	$ cts.	$ cts.
S.S. 'Abessinia'	5,753	May 6..	May 7..	556 00	2 40	558 40
S.S. 'Victoria'	3,502	" 14..	" 15..	511 00	8 40	519 40
S.S. 'Pennsylvania'	3,343	" 16..	" 18..	614 00	24 60	638 60
S.S. 'Warda'	5,751	" 21..	" 22..	400 00	1 80	401 80
S.S. 'Montrava'	2,562	" 22..	" 26..	768 00	6 60	774 60
Ship 'Glory of the Seas'	2,103	" 27..	" 28..	483 00	.....	483 00
S.S. 'Ammon'	4,534	June 1..	June 2..	532 00	1 80	533 80
S.S. 'Northwestern'	3,497	" 4..	July 26..	6,010 00	321 00	6,331 00
S.S. 'San Matreo'	2,927	Aug. 21..	Aug. 25..	697 00	16 20	713 20
S.S. 'Gymeric'	4,002	Oct. 9..	Oct. 10..	521 00	15 60	536 60
H.M.S. 'Shearwater'	980	" 11..	" 24..	509 00	.....	509 00
S.S. 'Tarter'	4,561	" 28..	Nov. 19..	3,172 00	180 60	3,352 60
S.S. 'Kazemba'	4,658	Nov. 19..	" 24..	936 00	35 70	971 70
S.S. 'Indraville'	4,805	" 25..	Jan. 15, '08.	8,407 00	378 60	8,785 60
		1908.	1908.			
H.M.S. 'Egeria'	940	Jan. 17..	Jan. 24..	313 60	.....	313 60
S.S. 'Lonsdale'	3,171	" 24..	" 30..	1,024 00	7 20	1,031 20
S.S. 'Restorer'	3,180	" 31..	Feb. 7..	1,024 00	43 20	1,067 20
S.S. 'Amiral Fourichon'	5,036	Feb. 7..	" 8..	541 00	18 69	559 60
S.S. 'Transit'	1,691	" 10..	" 11..	426 50	3 69	430 10
S.S. 'Georgia'	3,121	" 28..	" 29..	503 00	.....	503 00
S.S. 'Augustus'	4,767	Mar. 16..	Mar. 18..	536 00	10 20	546 20
S.S. 'Taunton'	.....	Entrance fee.		200 00	.....	200 00
	75,904			28,684 10	1,076 10	29,760 20

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

THE DRY DOCK AT LEVIS.

No. 10.—STATEMENT of Dues and other charges collected during year ending March 31, 1908.

Name of Vessel Docked.	Tonnage.	Period of Dockage. From.	Period of Dockage. To.	Dockage Charges.	Other Charges.	Total.
		1907.	1907.	$ cts.	$ cts.	$ cts.
S.S. 'Lord Strathcona'	495	Dec.	April	300 00	.....	300 00
S.S. 'Lady Eileen'	921	May 11..	May 18..	622 35	5 00	627 35
Govt. Str. 'Druid'	504	Dec. 6..	April 11..	400 00	.....	400 00
Govt. Str. 'Eureka'	170	April 16..	May 10..	504 00	.....	504 00
Light Ship 'Anticosti'	269	" 16..	" 10..	622 80	.....	622 80
S.S. 'Bay City'	1,252	May 31..	July 9..	.....	.....	.....
Barge 'Baroness'	1,295	.....	.....	7,209 26	3 00	7,212 26
" 'Bombay'	1,295	.....	.....	.....	.....	.....
S.S. 'Borgestad'	3,944	July 14..	July 16..	657 76	.....	657 76
S.S. 'Pollux'	1,352	Aug. 7..	Aug. 27..	1,566 80	6 50	1,573 30
Dredge 'Progress'	.....	Wintering, 1906–7.		400 00	.....	400 00
" 'International'	470	May 12..	May 18 .	441 00	.....	441 00
Scow	80	" 12..	" 18.	28 00	.....	28 00
Dredge 'Northumberland'	777	" 11..	" 29..	960 45	156 50	1,116 95
" 'Galveston'	1,267	July 25..	July 31..	692 09	6 00	698 09
" 'Progress'	.....	.....	.....	.....	71 67	71 67
" "	.....	.....	.....	.....	178 55	178 55
" 'International'	.....	.....	.....	.....	318 05	318 05
" "	.....	.....	.....	.....	28 16	28 16
Barge 'Rutherford'	.....	.....	.....	.....	2 00	2 00
Tug 'Monitor'	.....	.....	.....	.....	136 47	136 47
S.S. 'Speedy'	.....	.....	.....	.....	1 50	1 50
Tug 'Witherbee'	.....	.....	.....	.....	180 25	180 25
" 'Storm King'	.....	.....	.....	.....	56 65	56 65
Scow No. 1	.....	.....	.....	.....	777 65	777 65
S.S. 'Assiniboia'	.....	Entry fee.		200 00	.....	200 00
S.S. 'Keewatin'	.....	"		200 00	.....	200 00
S.S. 'Mongolian'	.....	"		200 00	.....	200 00
S.S. 'Assiniboia'	3,879	Sept. 24..	Oct. 1..	1,093 06	4 50	1,097 56
S.S. "	.....	Unwatering.		.....	40 00	40 00
S.S. "	.....	Oct. 1..	Oct. 3..	255 16	.....	255 16
S.S. 'Keewatin'	3,856	" 5..	" 15..	1,471 20	8 00	1,479 20
Str. 'Quebec'	.....	Entry fee.		200 00	.....	200 00
S.S. 'Montcalm'	1,432	Aug. 28..	Sept. 22..	1,961 00	.....	1,961 00
S.S. 'Montreal'	.....	Entry fee.		200 00	.....	200 00
S.S. "	8,644	Nov. 9..	Nov. 16..	1,760 16	5 00	1,765 16
Govt. Str. 'Lady Grey'	733	" 19..	" 22..	469 95	12 00	421 95
	32,635			22,355 04	1,997 45	24,352 49

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1908.

THE DRY DOCK AT KINGSTON, ONT.

No. 11.—STATEMENT of Dues and other charges collected during the year ending March 31, 1908.

Name of Vessel Docked.	Tonnage	Period of Dockage. From	Period of Dockage. To	Dockage Charges.	Other Charges.	Total.
		1907.	1907.	$ cts.	$ cts.	$ cts.
Str. 'New Island Wanderer'	123	April 2..	April 11..	111 96		111 96
Tug 'Emerson'	276	" 2..	" 9..	161 46	10 00	171 46
Str. 'Islander'	119	" 11..	" 15..	83 80		83 80
" 'New York'	295	" 15..	" 20..	141 60	10 50	152 10
" 'Business'	985	" 20..	" 21..	148 50		148 50
" 'St. Joseph'	304	" 22..	" 27..	145 92	10 50	156 42
" 'Cardinal'	237	" 27..	" 29..	67 40	5 00	72 40
Bge. 'Toledo'	362	" 30..	May 4..	161 09	12 00	173 09
Str. 'City of New York'	292	May 6..	" 7..	58 40		58 40
" 'D. D. Calvin'	750	" 9..	" 10..	125 00	10 50	135 50
Tug 'Gilbert'	41	" 13..	" 16..	60 00	5 00	65 00
Bge. 'Flora Carveth'	190	" 16..	" 20..	88 00		88 00
Str. 'North King'	873	" 21..	" 23..	198 41		198 41
Bge. 'Lapwing'	516	" 29..	June 1..	173 84	6 00	179 84
" 'Bella'	454	June 3..	" 4..	90 80		90 80
Yacht 'Corona'	304	" 5..	" 9..	114 00	10 50	124 50
Bge. 'Hilda'	418	" 10..	" 11..	83 60		83 60
Str. 'Rapids King'	1,801	" 12	" 13..	230 10	10 50	240 60
" 'Pierrepont'	153	" 14..	" 18..	90 60		90 60
" 'Argyle'	700	" 18..	" 19..	120 00		120 00
" 'Island Belle'	89	" 20..	" 20..	20 00	5 00	25 00
Bge. 'Regina'	411	" 21..	" 22..	82 20		82 20
Str. 'Island Belle'	89	" 23..	" 24..	30 00		30 00
Bge. 'Cornwall'	586	" 26..	July 4..	395 74	24 00	419 74
" 'Neepawah'	1,799					
" " cargo	1,301	July 6	" 11..	1,119 50	25 00	1,144 50
" 'Cayuga'	2,196	" 13..	" 16..	500 18	31 50	531 68
Str. 'New Island Wanderer'	123	" 18..	" 19..	24 60	15 50	40 10
Tug 'Jessie Hall'	56	" 19..	" 20..	20 00		20 00
Str. 'Cayuga'	2,196	" 24..	" 27..	577 04	26 00	603 04
" 'Brockville'	191	" 28..	" 28..	38 20		38 20
" 'Bothnia'	833	" 30..	Aug. 1..	191 61	3 00	194 61
" 'Castanet'	54	Aug. 1..	" 2..	20 00		20 00
Bge. 'John Gaskin'	487	" 5..	" 6..	97 40	5 00	102 40
" 'Chirokee'	365	" 6..	" 7..	73 00		73 00
" 'Regina'	411	" 8..	" 9..	82 20		82 20
" 'Bella'	454	" 17..	" 17..	90 80		90 80
" 'Melbrose'	740	" 21..	" 22.	149 90	3 00	152 90
Str. 'Island Belle'	89	" 27..	" 27..	20 00		20 00
Tug 'Mary'	62	" 28..	" 30..	50 00		50 00
Bge. 'Iroquois'	361	" 31..	Sept. 1..	72 20		72 20
" 'Nadine'	484	Sept. 3..	" 4..	96 80		96 80
Government dredge and tug 'Trudeau'	200	July 5..	Vouch. 496	100 00	10 50	110 50
Bge. 'Hilda'	418	Sept. 11..	Sept. 12..	83 60		83 60
" 'Condor'	567	" 16..	" 17..	106 70		106 70
Tug 'Jessie Hall'	56	" 23..	" 23..	20 00		20 00
Str. 'Ottawa'	94	Oct. 1..	Oct. 8..	150 00	8 00	158 00
" 'New Island Wanderer'	123	" 10..	" 11..	24 60		24 60
" 'John Rugee'	1,217	" 11..	" 12..	256 89	10 00	266 89
" 'New Island Wanderer' and 'Ottawa'	217	" 14..	" 17..	93 40		93 40
" 'Haddington'	1,603					
" " cargo	257	" 22..	" 22..	236 00	10 00	246 00
" 'Saginaw'	Entrance fee.		Nov. 23..			100 00
" 'Assiniboia'	Damage to wharf.					10 00
			1908.			
" 'Saginaw'	357	Nov. 23..	Jan. 20..	618 85	104 00	722 85
Bge. 'Ungava'	Entrance fee.					100 00
		1908.				
" "	1,226	Jan. 23..	April 3..	610 10	9 00	619 00
	31,005			8,605 99	380 00	9,095 89

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 23, 1908.

EDWARD T. SMITH,
Collector of Public Works Revenue.

No. 12.—STATEMENT of Rents outstanding uncollected on March 31, 1908.

Name.	Place.	Street and No.	Amount.
			$ cts.
Le Temps Printing and Publishing Co.	Ottawa	Sussex Street, No. 552-4	197 40
J. D. Grace	"	" 544	30 00
M. Dunn	"	" 336	15 00
J. R. Shaw & Co	"	" 424	120 00
A. Bureau & Freres	"	" 550	75 00
A. Perrault	"	" 414	17 00
Victor Belanger	"	McKenzie Ave., 36	34 00
Mrs. Dionne	"	" 37	20 00
Mrs. Desrosiers	"	" 38	30 00
F. McDongall	"	" 40	40 00
Mrs. J. B. Paquette	"	St. Patrick St., 106	33 00
			611 40

EDWARD T. SMITH,
Collector of Public Works Revenue.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 15, 1508.

PART VII

MISCELLANEOUS

CONTRACTS LET BY THIS DEPARTMENT.

PROPERTY PURCHASED OR SOLD.

PROPERTY, LEASED TO OR BY THE DEPARTMENT.

CURATOR'S REPORT, NATIONAL ART GALLERY.

NAMES OF CHIEF OFFICERS OF THE DEPARTMENT.

NAMES OF OFFICIALS EMPLOYED ON SLIDES AND BOOMS.

NAMES OF PERSONS EMPLOYED ON GRAVING DOCKS.

NAMES OF ENGINEERS, FIREMEN AND CARETAKERS OF PUBLIC BUILDINGS.

AND THE OFFICIAL CORRESPONDENCE OF THE DEPARTMENT.

FOR THE

FISCAL YEAR ENDED MARCH 31, 1908

Department of Public Works of Canada,
Law Clerk's Office, Ottawa, Oct. 10, 1908.

Sir,—I beg to transmit to you herewith inclosed the following statements, concerning the transactions of the department, from the 1st day of April, 1907, to the 31st day of March, 1908, with respect to contracts and properties, and which are required for insertion in the annual report for the period above-mentioned, viz.:—

No. 1.—Statement of contracts let by this department, from the 1st day of April, 1907, to the 31st day of March, 1908.

No. 2.—Statement of property purchased and sold by the said department during the same period.

No. 3.—Statement of property leased to and by the said department during the same period.

I have the honour to be, sir, your obedient servant,

J. A. CHASSE,
Law Clerk.

Napoleon Tessier, Secretary,
Department of Public Works,
Ottawa, Ont.

STATEMENTS

SHOWING

1ST.—CONTRACTS LET BY THE DEPARTMENT OF PUBLIC WORKS OF CANADA, FROM APRIL 1, 1907, to MARCH 31, 1908.

2ND.—PROPERTY PURCHASED OR SOLD BY THE DEPARTMENT OF PUBLIC WORKS DURING THE FISCAL YEAR ENDED MARCH 31, 1908.

3RD.—PROPERTY LEASED TO AND BY THE DEPARTMENT OF PUBLIC WORKS DURING THE FISCAL YEAR ENDED MARCH 31, 1908.

No. 1—CONTRACTS let by the Department of Public Works of Canada, from April 1, 1907, to March 31, 1908.

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS.			$ cts.
Nova Scotia.			
Amherst, Post Office. Alterations to fittings	Rhodes, Curry & Co., Ltd.	May 3, 1907.	1,879 00
" " Supply of coal	Maritime Coal Ry. Power Co	Sept. 13, 1907.	
Annapolis " "	R. W. Hardwick	" 13, 1907.	226 57
Antigonish " "	N. L. Cunningham	Nov. 14, 1907.	155 25
Arichat " "	I. LeBlanc & Terrio Co	Oct. 30, 1907.	181 25
Baddeck " "	McKay, MacAskill & Co	Sept. 7, 1907.	207 00
Bridgewater. Construction of Post Office, &c., Building	A. D. Falconer & W. K. McDonald	Oct. 3, 1907.	23,500 00
Canso, Public Building. Supply of coal	A. W. Whitman & Son	Sept. 13, 1907.	262 00
" Post Office. Tower clock	R. D. Kirk	Nov. 15, 1907.	1,250 00
Dartmouth, Public Building. Supply of coal	Acadia Coal Co.	Oct. 1, 1907.	75 44
Digby " "	W. E. Van Blarcom	Sept. 13, 1907.	228 57
Glace Bay. Construction of Post Office &c., Building	Rhodes, Curry & Co., Ltd.	Dec. 10, 1907.	34,500 00
Guysborough, Public Building. Supply of coal	A. W. Whitman	Sept. 13, 1907.	239 75
Halifax, Detention Hospital. Supply of beds	Brander, Morris & Co	Nov. 25, 1907.	Per section, $42.
" Dominion Building. Supply of coal	S. Cunard & Co	Oct. 1, 1907.	211 15
" New Custom House. "	"	" 1, 1907.	464 86
" Asst. Rec. General's Office. "	"	" 1, 1907.	38 12
" Immigration Building. "	"	" 1, 1907.	521 32
" Examining Warehouse. "	"	" 1, 1907.	240 06
" Asst. Rec. General's Office. "	H. D. Mackenzie Co	" 19, 1907.	38 10
" Detention Hospital. "	"	" 19, 1907.	496 73
Inverness, Public Building. Interior fittings	B. McIsaac	Jan. 29, 1908.	3,070 00
Kentville " Supply of coal	P. E. Lloyd	Nov. 8, 1907.	312 92
Lawlor's Island, Quarantine Station. Electric light equipment	P. E. Marchand & Co	Feb. 7, 1908.	8,497 00
Lunenburg, Public Building. Supply of coal	John B. Young	Sept. 30, 1907.	197 75
" " Sidewalks	R. S. Lowe	Oct. 15, 1907.	Schedule of prices.
New Glasgow " Supply of coal	Charles W. Ives	" 1, 1907.	
Shelburne. Construction of Public Building	Hood & Brooks	Feb. 12, 1908.	22,500 00
Springfield, Post Office. Supply of coal	Cumberland Ry. & Coal Co.	Oct. 30, 1907.	230 00
Sydney, Public Building. "	Fred. Routledge	Nov. 21, 1907.	245 00
Sydney Mines, Public Building. Supply of coal	Mackay Mining Co		75 00
Truro. Construction of an Armoury	Frank Wilson	Aug. 9, 1907.	8,135 50
" Armoury. Heating apparatus	F. Dexter & Co	Feb. 24, 1908.	1,650 00
Westville. Construction of Post Office and Building	E. F. Munro	Sept. 14, 1907.	12,997 00
Windsor, Public Building. Supply of coal	Fred. W. Dimock	" 30, 1907.	275 48
Yarmouth " "	L. E. Baker & Co	Oct. 1, 1907.	292 50
" " Tower clock	Williams & Myman	Jan. 15, 1908.	
Prince Edward Island.			
Charlottetown, Dominion Building. Supply of coal	Peake Bros. & Co	Oct. 7, 1907.	18 00
" " "	A. Pickard & Co	" 7, 1907.	717 94
Charlottetown, Post Office. Interior fittings	H. & S. Lowe	Nov. 14, 1907.	175 00
Montague, Public Building. Supply of coal	A. Pickard & Co	Oct. 7, 1907.	48 87
" " "	Geo. Wightman	" 5, 1907.	155 15
Summerside " "	R. T. Holman, Ltd	Sept. 28, 1907.	353 37
" " Granolithic sidewalks	M. F. Scharman & Co	Nov. 18, 1907.	Schedule of prices.
New Brunswick.			
Bathurst, Public Building. Supply of coal	B. M. Lannagan	Sept. 28, 1907.	
Campbellton " "	Chas. Powell	Oct. 1, 1907.	321 94
Dalhousie " "	"	" 1, 1907.	266 66

No. 1—CONTRACTS let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS—*Continued.*			$ cts.
New Brunswick—Concluded.			
Fredericton Public Building. Supply of coal	Pat. Farrell	Sept. 30, 1907.	269 70
Marysville " "	Frank I. Morrison	" 30, 1907.	157 02
Moncton " Electric wiring	Electrical Supply Co., of Moncton	May 29, 1907.	1,000 00
Newcastle " Supply of coal	The Stothart Mercantile Co.	Sept. 28, 1907.	190 19
" " "	John Russell & Co.	" 28, 1907.	178 10
Richibucto " "	J. & T. Jardine	" 27, 1907.	304 35
St. John, West Post Office. "	R. P. & W. F. Starr	" 27, 1907.	62 77
" City Post Office. "	"	" 27, 1907.	692 37
" Savings Bank. "	"	" 27, 1907.	284 27
" Custom House. "	R. P. & W. F. Starr	Sept. 27, 1907.	1,652 91
" Immigration Building "	"	" 27, 1907.	1,471 41
" Military Stores Building, Alterations to.	John Flood & Edw. Bates.	Nov. 1, 1907.	19,986 00
" Military Building, Alterations and additions	"	Dec. 21, 1907.	750 00
St. Stephens, Public Building. Supply of coal	W. C. Purvis	Oct. 9, 1907.	171 75
Sussex " "	Thos. H. Brown	Sept. 28, 1907.	356 25
Tracadie Lazaretto "	The Stothart Mercantile Co.	" 28, 1907.	667 45
" Construction of Laundry.	Thos. P. Charleson	May 23, 1907.	8,465 00
Woodstock, Public Building. Supply of coal	W. F. Dibblee & Son	Sept. 30, 1907.	355 49
Quebec.			
Acton Vale, Post Office. Supply of coal	S. E. Desmarais & Co.	Oct. 11, 1907.	
" " "	Anthime Cadoret	" 4, 1907.	25 60
Aylmer " "	Hull Coal Co	" 4, 1907.	242 93
Berthierville " "	F. O. Lamarche	" 21, 1907.	103 45
Chicoutimi " Interior fittings	Adolphe Beaulieu	May 3, 1907.	2,950 00
Drummondville " Supply of coal	Anthime Cadoret	Oct. 4, 1907.	187 00
Dundee, Custom House, "	A. S. Matthews	" 4, 1907.	33 75
Farnham, Public Building "	Arthur Giroux	" 4, 1907.	65 00
Fraserville " "	Nap. Dion	Nov. 23, 1907.	266 50
Granby " "	P. Phœnix	Oct. 4, 1907.	199 50
Hochelaga " "	F. Lambert	Nov. 14, 1907.	150 19
Hull, Post Office "	Hull Coal Co	Oct. 4, 1907.	296 00
Iberville " Interior fittings	H. Langlois & Co	July 16, 1907.	2,000 00
" " Sidewalks	Louis Bourassa	Oct. 8, 1907.	545 31
Joliette, Public Building. Supply of coal	Sinai Bourgeois	" 4, 1907.	261 19
Lachine " "	A. & A. Martin	" 4, 1907.	104 48
Lachute, Construction of Post Office, &c., Building	O. B. Lafleur & Son, Ltd.	Nov. 22, 1907.	14,971 00
Laprairie, Public Building. Supply of coal	H. Brossard	Oct. 4, 1907.	140 00
L'Assomption " "	Louis Desmarais	" 4, 1907.	153 00
Lennoxville, Quarantine Station. Water Service.	J. Simoneau & A. Dion	Nov. 5, 1907.	105 00
Lévis, Public Building, Supply of coal	Robitaille & Co	Oct. 26, 1907.	231 53
" Post Office. Fittings	Joseph Couture	April 17, 1907.	3,500 00
" " Supply of current for lighting.	Canadian Electric Light Co.	Oct. 1, 1907.	Sch. of rates
Longueuil, Public Building. Supply of coal	C. F. Dénicourt	" 7, 1907.	162 50
Montmagny " " water	Montmagny Water Supply Co., Ltd	July 22, 1907.	P. an. 50 00
" " Fittings	J. A. Bélanger	Dec. 30, 1907.	1,130 00
" " Supply of electric current	Price Bros. & Co., Ltd.	Jan. 1, 1908.	Sch. of rates
Montreal, Custom House. Supply of coal	J. C. Macdiarmid	Oct. 30, 1907.	855 16
" Exam. Warehouse "	"	" 30, 1907.	1,046 39
" Post Office "	"	" 30, 1907.	1,064 07
" Revenue Building "	"	" 30, 1907.	326 10
" Immigration Building "	"	Jan. 30, 1907.	338 49
" Post Office Registration Branch. Alterations to	J. B. Pauzé & Co	May 17, 1907.	1,150 00
" Postal Station "C". Fittings	J. B. Gratton	June 16, 1907.	1,300 00
" " "B". Alterations	J. Bourque & Co	Aug. 2, 1907.	2,350 00

No. 1.—CONTRACTS let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS—*Continued.*			$ cts.
Quebec—Continued.			
Montreal. Addition to Post Office	Peter Lyall & Sons	Oct. 12, 1907	487,537 00
" Post Office. Supply of sorting cases	N. G. Valiquette, Ltd.	" 22, 1907	48 50
" " Money order. Special cabinet	"	" 22, 1907	322 00
" Postal Station "B". Fittings	Jos. Bourque & Co	Mar. 6, 1908	4,450 00
" " Fixtures	N. Simoneau	Dec. 26, 1907	625 00
Nicolet, Post Office. Interior fittings	J. O'Shaughnessey	Nov. 15, 1907	2,750 00
Quebec, Store Building for Dominion Arsenal	J. B. Jinchereau & P. A. Lemonde	May 7, 1907	34,777 00
" Trachoma Hospital. Supply of beds	Geo. Vallieres	" 16, 1907	P. sec. 39 10
" Detention Building. Extra works	J. B. Jinchereau & P. A. Lemonde	April 23, 1907	962 86
" " Sewer pipe	J. A. Guérard & Co.	Oct. 3, 1907	3,187 04
" Dominion Arsenal, Store Building. Heating apparatus	O. Picard et fils	Jan. 30, 1908	1,920 00
" Dominion Arsenal. Electric wiring	Chas. Vézina	Feb. 20, 1908	875 00
" Drill Hall. Grading and levelling	Ignace Bilodeau	" 24, 1908	3,075 00
" Custom House. Supply of coal	Jos. Gingras	Oct. 16, 1907	25 98
" Post Office "	"	" 16, 1907	777 08
" Gov. Gen'l. Quarters "	"	" 16, 1907	555 69
St. Roch, Post Office. "	Jos. Gingras	" 16, 1907	40 97
Quebec, Cullers' Office. "	M. Madden	" 15, 1907	677 36
" Custom House. "	"	" 15, 1907	
" Marine Agency. "	"	" 15, 1907	1,006 22
" Examining Warehouse. "	"	" 15, 1907	
" Immigration Office. "	"	" 15, 1907	321 97
" Hospital. "	"	" 15, 1907	1,162 91
Richmond, Post Office. "	S. E. Desmarais & Co	" 11, 1907	418 21
Rimouski, " "	H. G. Lepage	" 4, 1907	208 75
St. Henri, " "	Canada Coal Company	Nov. 6, 1907	140 00
St. Hyacinthe " "	Anthime Cadoret	Oct. 4, 1907	207 84
" Inland Revenue. "	" "	" 4, 1907	120 00
St. Jérome, Public Building. "	S. G. Laviolette	" 4, 1907	255 00
St. Johns, " "	D. Godin & Co	" 5, 1907	117 07
" " Fixtures	D. H. Langlois & Co	July 23, 1907	2,000 00
" " Stables for Cavalry	A. Saurette	Aug. 12, 1907	31,200 00
St. Louis du Mile End, Pub. B'ldg. Supply of coal	Wilson Coal Company	Oct. 18, 1907	167 50
" " " Fire escape	The International Steel Co.	Aug. 28, 1907	450 00
Sherbrooke, Public Building. Supply of coal	Codère. Fils & Cie	Oct. 4, 1907	412 37
" Construction of a Drill Hall	J. Simoneau & A. Dion	Nov. 7, 1907	82,500 00
Sorel, Public Building. Supply of coal	A. Plante	Oct. 12, 1907	342 00
Terrebonne, " "	Calixte Gauvreau	" 4, 1907	144 00
Thetford Mines, " "	Roberge & Roberge	" 4, 1907	290 00
Three Rivers, Custom House. "	Geo. Leprohon	" 14, 1907	482 96
" Drill Hall. Fittings	P. Blais	Aug. 7, 1907	550 00
Valleyfield, Public Building. Supply of coal	Besner & Chasle	Oct. 4, 1907	338 77
Victoriaville. Public Building	Octave Gaudet	" 4, 1907	149 50
Ontario.			
Alexandria, Public Building. Supply of coal	Angus McDonald & Son	Oct. 2, 1907	187 93
Almonte, " "	Taylor Brothers, Limited	" 5, 1907	222 75
Amherstburg, " "	Falls Brothers	" 3, 1907	156 00
Arnprior, " "	R. S. Drysdale	" 1, 1907	254 75
Barrie, " "	S. G. Scott	" 1, 1907	297 00
Belleville, " "	C. C. Leavens	" 4, 1907	616 25
" Construction of a Drill Hall	William Stuart	May 17, 1907	94,000 00
Berlin, Public Building. Supply of coal	R. Boehmer & Co	Oct. 3, 1907	270 03
Bowmanville, " "	McClellan & Co	" 4, 1907	168 75
Brampton, " "	The Irvine Lumber & Fuel Company	Nov. 1, 1907	225 00
Brantford, " "	The Gibson Coal Company	Oct. 2, 1907	216 68

SESSIONAL PAPER No. 19

No. 1—Contracts let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
Public Buildings—*Continued.*			$ cts.
Ontario—Conitnued.			
Brantford, Drill Hall. Improvement to Parade Grounds.	The Brantford Board Commissioners	May 2, 1907.	1,000 00
" Drill Hall. Maintenance	" " "	" 2, 1907.	P. an. 250 00
" " Bowling Alley	Ketchum & Company	Feb. 22, 1908.	650 00
" " Armoury. Fittings	The Schultz Brothers Co.	Mar. 2, 1908.	2,200 00
" Public Building. Repairs	" "	Dec. 3, 1907.	3,429 00
Bridgeburg, " Supply of coal	Isaac White	Oct. 5, 1907.	180 90
Brockville, " New soil pipes	Brown & Semple	Jan. 27, 1908.	258 00
" " Supply of coal	The Central Canada Coal Co., Ltd	Oct. 1, 1907.	393 19
Carleton Place, " New roof	W. J. Muirhead	Aug. 28, 1907.	395 00
" " Supply of coal	Taylor Brothers, Limited	Oct. 5, 1907.	187 50
Chatham, " "	A. R. Crow	" 2, 1907.	218 86
" " Wiring	The Chatham Gas Co., Ltd.	Mar. 9, 1908.	598 34
" Armoury. Bowling Alleys	Ketchum & Company	May 4, 1907.	1,050 00
" " Fittings	Piggott & Sons	" 4, 1907.	446 00
Clinton, Public Building. Supply of coal	James Hamilton	Oct. 1, 1907.	211 30
Cobourg, " "	E. A. Duncan	" 2, 1907.	247 00
Cornwall, " "	A. F. Mulhern & Company.	" 1, 1907.	278 00
" " Fittings	The Berlin Interior Hardwood Co., Limited	Jan. 2, 1908.	1,469 00
Deseronto " Supply of coal	The Rathbun Co	Oct. 10, 1907.	303 75
Dundas " "	Charles Sturrock	" 2, 1907.	39 00
Fort William " "	James Murphy	" 3, 1907.	416 00
Galt " "	Hastings Bros	" 3, 1907.	276 00
" " Alterations	The Atlas Table Co. of Preston	Nov. 20, 1907.	393 00
Gananoque " Supply of coal	C. E. Britton	Oct. 1, 1907.	149 41
" Custom House "	"	" 1, 1907.	
" " Cement walks	F. Dolan & Son	Aug. 9, 1907.	Schedule of prices.
Goderich, Public Building Supply of coal	Wm. Lee	Oct. 5, 1907.	256 31
Guelph " "	M. F. Cray	" 8, 1907.	480 34
" Armoury. Electric wiring	Nagle & Mills	" 22, 1907.	1,700 00
" " Heating apparatus	"	" 22, 1907.	4,100 00
Hamilton, Public Building. Supply of coal	The Connell Anthracite Mining Co	" 5, 1907	1,086 89
" Examining Warehouse. Supply of coal	" "	" 5, 1907	
" Weights and Measures and Gas Inspectors Office. Supply of coal	" "	" 5, 1907.	
" Old Drill Hall. Removal of roof	Wm. M. Findley	Nov. 15, 1907.	1,275 00
" Public Building. Hand power elevator	Otis Fensom Elevator Co.	Oct. 24, 1907.	595 00
" Stone coping on north wall	F. Webb	Feb. 11, 1908.	490 00
Hawkesbury, Custom House. Works at	Daoust & Bélanger	July 18, 1907.	520 00
" Public Building. Supply of coal	E. A. Hall	Oct. 4, 1907.	215 66
Ingersoll " "	Geo. F. Barons	" 2, 1907.	217 35
Kenora " "	Windatt & Co	Nov. 5, 1907.	223 13
Kincardine. Construction of Public Building	William Nicholson	" 29, 1907.	17,700 00
Kingston, Custom House. Supply of coal	P. Walsh	Oct. 1, 1907.	268 25
" Post Office "	"	" 1, 1907.	435 00
" R. M. C. Servants' Quarters. Construction of	M. Sullivan	Jan. 15, 1908.	77,939 00
" R. M. C. Lowering drain	"	Feb. 15, 1908.	1,198 00
Lindsay, Public Building. Supply of coal	McLennan & Co	Oct. 4, 1907.	114 17
" " "	James Maunder & Son	" 4, 1907.	114 92
" " Alterations to fittings	S. L. Kyle	Jan. 27, 1908.	307 00
London, Post Office. Supply of coal	The Connell Anthracite Mining Co	" 5, 1907.	209 68
" Custom House "	" "	" 5, 1907.	419 43
" Military Stores. Electric elevator	Otis Fensom Elevator Co.	May 15, 1907.	2,150 00
" Post Office. Vault fittings	W. Tytler	Aug. 28, 1907.	1,475 00

No. 1—CONTRACTS let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS—*Continued.*			$
Ontario—Continued.			
London Military Stores Building. Supply of current for elevator	The London Electric Co.	Oct. 10, 1907.	Per annum, $700.
" Military Stores Building. Extension of electric wires	" "	Nov. 22, 1907.	690 00
" Military Stores Building. Current for elevator	" "	" 22, 1907.	Per annum. $120.
" Military Stores Building. Current for lighting	" "	" 22, 1907.	Schedule of prices.
Napanee, Public Building. Supply of coal	The Rathbun Co.	Oct. 10, 1907.	202 50
Niagara Falls " "	J. E. Hutchings	Sept. 13, 1907.	234 00
North Bay " Heating apparatus	Wm. McGillivray & P. Labelle	Dec. 9, 1907.	3,100 00
Orangeville " Supply of coal	James R. Lathwell	Sept. 13, 1907.	168 50
Orillia " "	The Serjeant Co.	Oct. 13, 1907.	246 01
Oshawa " "	David Keith	Sept. 28, 1907.	189 00
Ottawa, Experimental Farm "	The C. C. Ray Co., Ltd.	Oct. 2, 1907.	1,359 72
" Observatory "	" "	" 2, 1907.	214 60
" House of Commons. Nernst lamps for	Ahearn & Soper, Ltd	Apr. 3, 1907.	4,750 00
" Royal Mint. Switchboard	" "	May 16, 1907.	1,876 00
" " Westinghouse generator	" "	" 13, 1907.	3,964 00
" " Switchboard	" "	" 15, 1907.	3,294 00
" Westinghouse induction motor	" "	" 15, 1907.	4,134 00
" Archives Building. Metallic fittings	The Eclipse Mfg. Co., Ltd.	" 17, 1907.	17,478 00
" Public Buildings. Supply of ice	J. O. Charlebois & Co.	" 20, 1907.	Schedule of rates.
" Royal Observatory. Steel cases	Office Specialty Mfg. Co.	" 17, 1907.	5,970 00
" Royal Mint. Supply of machine, tools, &c	General Supply Company of Canada, Ltd	" 22, 1907.	9,336 25
" Royal Mint. Supply of trucks	Andrew Ross	" 23, 1907.	2,070 00
" Public Buildings. Supply of coal	John Heney & Son.	" 22, 1907.	52,920 00
" Printing Bureau. Fire escapes	Capital Scale Brass & Iron Foundry Co.	" 25, 1907.	4,290 00
" Royal Mint Laboratory. Electric elevator.	Otis Fensom Elevator Co., Ltd	June 15, 1907.	2,800 00
" " Bunker's vault door	The Goldie & McCulloch Co., Ltd	" 14, 1907.	3,000 00
" Interior Dept., Reg. Branch. Steel cases.	Office Specialty Mfg. Co., Ltd.	July 4, 1907.	11,560 00
" " Lands Patent Branch, Steel cases	Office Specialty Mfg. Co., Ltd	" 20, 1907.	4,200 00
Ottawa, Royal Mint. Guards' rooms and fence	Sullivan & Langdon	Sept. 18, 1907.	34,529 00
" House of Commons. Work in fan room	Canadian Buffalo Forge Co.	June 18, 1907.	4,900 00
" Post Office Department. Sorting cases	Office Specialty Mfg. Co., Ltd	Aug. 10, 1907	1,374 00
" Supreme Court. Shelving	The Eclipse Mfg. Co., Ltd.	Sept. 27, 1907.	6,995 00
" Customs Department. Metal file case	" " "	Oct. 1, 1907.	4,750 00
" Coelestat House. Construction of	Jno. O'Leary & M. J. Whelan	" 23, 1907	13,900 00
" Royal Mint. Mechanics' shop. Electric elevator	Otis—Fensom Elev. Co., Ltd.	July 2, 1907.	2,725 00
" Secretary of State. Registrar's Office Metallic fittings	Office Specialty Mfg. Co., Ltd	Oct. 12, 1907.	2,682 00
" Interior Department. Metallic fittings	" "	Jan. 4, 1908.	4,879 00
" Geological Survey Branch. Filing cases.	The Eclipse Mfg. Co.	Feb. 22, 1908.	955 00
" Archives. Map cases	" "	" 22, 1908.	998 00
" Interior Dept., Mines Branch. Filing cases	" "	Mar. 24, 1908.	885 00
Owen Sound. Construction of a Public Building.	Nagle & Mills	April 8, 1907.	63,424 00
" Public Building. Electric wiring	McLinden Bros.	Mar. 10, 1908.	735 00
" " Heating apparatus	J. H. McCarkindale	Nov. 12, 1907.	2,515 00
Paris " Supply of coal	Geo. E. Taylor	Oct. 2, 1907.	122 57

SESSIONAL PAPER No. 19

No. 1.—CONTRACTS let by the Department of Public Works of Canada, &e.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS—*Continued.*			$ cts.
Ontario—Concluded.			
Pembroke, Public Building. Supply of coal....	W. D. Morris.	Oct. 5, 1907.	260 96
Peterborough " "	J. E. A. Fitzgerald.....	" 14, 1907.	291 76
" Custom House "	"	" 14, 1907.	244 96
Petrolia, Public Building "	J. & J. Kerr Co.....	Sept. 30, 1907.	170 63
Picton " "	W. H. Lake.....	Oct. 8, 1907.	222 75
Port Arthur " Addition to.. ...	Chas. H. Sherwood.....	Dec. 16, 1907.	7,475 00
Port Hope " Supply of coal....	J. M. Rosevear.....	Sept. 28, 1907.	325 95
Prescott. Custom House. Supply of coal.....	James Buckley	" 28, 1907.	124 00
" Post Office "	"	" 28, 1907.	217 00
" Custom House. Electric wiring.....	H. Rankin & W. F. Fraser	" 22, 1907.	224 00
" Post Office " and fittings	" " ..	Mar. 11, 1908.	448 90
St. Catharines. Public Building. Carpenter work..	J. W. Carl	Nov. 25, 1907.	1,325 00
" " Plumbing works.	A. Riddell & Son..... ...	" 25, 1907.	1,095 00
" " Painting and kalsomining..	Begy, Son & Co.....	" 25, 1907.	900 00
St. Mary's. Public Building. Supply of coal....	James Armstrong.....	" 5, 1907.	217 50
" " Electric wiring and fixtures.... ...	L. H. Reesor..	Aug. 30, 1907.	775 00
" " Heating apparatus.	McDonald & Henry.....	Nov. 13, 1906.	1,346 00
" " Changes in upper portion of..	R. Cameron	Dec. 3, 1907.	2,150 00
" " Fittings..	"	Jan. 14, 1908.	3,515 00
St. Thomas " Supply of coal....	W. H. Swift & Co	Oct. 8, 1907.	280 00
Sandwich " "	J. & T. Hurley.....	" 9, 1907.	104 73
Sarnia " "	Clark Coal Co	" 8, 1907.	286 00
" " Alterations and additions to.... ...	R. Corrick & Son.....	July 20, 1907.	7,200 00
" " Heating apparatus.	Juss & Marshall	Dec. 18, 1907.	448 00
Sault Ste. Marie " Supply of coal....	The Sault Ste. Marie Coal and Wood Co.....	Oct. 7, 1907.	354 86
Simcoe. Construction of a Post Office Building .	The Schultz Bros. Co., Ltd.	Jan. 15, 1908.	26,500 00
Smith's Falls. Public Building. Supply of coal.	Hiram A. Crate.....	Sept. 30, 1907.	175 50
Stratford " " ..	Angus Johnson & Co.....	" 13, 1907.	389 98
Strathroy " " ..	Alexander Reed	" 28, 1907.	198 73
" Armoury. Construction of.	Nagle & Mills	Nov. 27, 1907.	13,461 00
Toronto. Armoury. Addition to. Heating plant.	Sullivan & Langdon.....	May 15, 1907.	4,890 00
" Postal Station 'F.' Sodding and pavement	Brown & Love.....	" 27, 1907.	840 00
" Custom House. Repairs to roof	Wheeler & Bain	June 8, 1907.	2,650 00
" Drill Hall. Wiring.....	Fitzsimmons Co., Ltd.....	Sept. 10, 1907.	3,519 00
" Armoury. Additional heating..	Sullivan & Langdon.....	Nov. 7, 1907.	897 00
" Post Office Building. Additions, &c..	George Henry	" 30, 1907.	19,694 00
" Observatory. Construction of.....	F. D. Brown & H. G. Love.	Jan. 20, 1908.	91,800 00
" Station. Post Office. Supply of coal.	P. Burns & Co.....	Nov. 12, 1907.	
" Junction " " ..	The Connell Anthracite Mining Co..	Oct. 5, 1907.	205 65
" Custom House " ..	" " ..	" 5, 1907.	610 84
" Examining Warehouse " ..	" " ..	" 5, 1907.	905 31
" Post Office " ..	" " ..	" 5, 1907.	1,008 47
" Station 'C' " ..	" " ..	" 5, 1907.	218 25
" Station 'F' " .	" " ..	" 5, 1907.	255 91
" Revenue Office " ..	" " ..	" 5, 1907.	249 33
Trenton, Public Building. Supply of coal.....	B. W. Powers	Sept. 28, 1907.	210 80
Walkerton " "	S. W. Vogan	Oct. 12, 1907.	334 63
" Construction of an Armoury.....	R. Truax & Co.....	Aug. 15, 1907.	8,775 00
" Heating apparatus to Armoury	"	Feb. 4, 1908.	800 00
Windsor, Public Building. Supply of coal	J. M. Mullen	Oct. 9, 1907.	23 50
" " "	F. W. Scully	" 9, 1907.	444 30
Wingham " "	John A. MacLean	" 2, 1907.	248 38
Woodstock " "	The McIntosh Co	Sept. 28, 1907.	318 38
" Armoury Bowling Alleys.....	Ketchum & Co.....	Aug. 28, 1907.	1,050 00

No. 1—CONTRACTS let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
			$ cts.
PUBLIC BUILDINGS—*Continued.*			
Manitoba.			
Brandon, Experimental Farm. Supply of coal	Robert Purdon & Co	Oct. 5, 1907.	198 00
" Construction of an Armoury	Paul T. C. Dunais & L. Lachance	Aug. 22, 1907.	52,754 00
" Armoury. Shooting Gallery	" "	Oct. 30, 1907.	3,855 00
" Post Office. Supply of coal	Robert Purdon & Co	" 5, 1907.	785 56
" Experimental Farm "	The Canadian Coal & Commission Co	" 8, 1907.	179 29
" Post Office "	" "	" 8, 1907.	.....
" Immigration Office "	" "	" 8, 1907.	891 85
Neepawa, Construction of Post Office Building	Fusee McFeetors Co., Ltd.	Jan. 27, 1908.	28,000 00
Portage la Prairie, Public Building, Supply of coal.	Windatt & Co	Nov. 5, 1907.	526 24
St. Boniface, Public Building. Heating apparatus.	Laplante & Fournier	Oct. 11, 1907.	1,450 00
" " Electric wiring	"	Nov. 29, 1907.	750 00
Selkirk, Construction of a Public Building	S. Brown & Wm. Garson	Oct. 14, 1907.	24,000 00
Winnipeg, Immigration Hall. Supply of coal	Harstone Bros	Sept. 30, 1907.	2,432 45
" Hospital "	"	" 30, 1907.	.....
" Post Office (new and old) "	"	" 30, 1907.	2,207 41
" Custom House "	"	" 30, 1907.	453 82
" Immig. Office & Sheds "	"	" 30, 1907.	.....
" Indian Off. & T. C. Office "	"	" 30, 1907.	.....
" Examining Warehouse "	"	" 30, 1907.	296 94
" Postal Station 'B'. Construction of	J. McDiarmid Co., Ltd	May 14, 1907.	46,500 00
" " Electric wiring	The Shipman Electric Co.	Aug. 9, 1907.	1,075 00
" Post Office. Fittings	The Berlin Interior Hardwood Co., Ltd	" 27, 1907.	12,675 00
" Fort Osborne. Guard room, Offices & Store Building	J. McDiarmid Co., Ltd	Sept. 12, 1907.	25,475 00
" Postal parcels. Custom fittings	"	Oct. 11, 1907.	4,845 00
" Postal Station 'B'. Heating apparatus	Cotter Bros.	" 15, 1907.	1,977 21
" Fort Osborne. Quarters for N.C. officers and men	J. McDiarmid Co., Ltd	Nov. 13, 1907.	39,975 00
" Post Office. Supply of dumb waiters	Otis Fensom Elev. Co., Ltd.	" 7, 1907.	2,425 00
Alberta.			
Calgary, Immigration Shed. Supply of coal	C. S. Lott	Oct. 3, 1907.	209 23
" Post Office "	"	" 3, 1907.	1,199 30
" " Passenger elevator.	Turnbull Elevator Mfg. Co.	Sept. 12, 1907.	6,200 00
Edmonton, Dominion Land. Supply of coal	J. J. Denman	Oct. 4, 1907.	.....
" Immigration Building "	"	" 4, 1907.	399 22
Lethbridge, Post Office "	The Alberta Ry. & Irrigation Co	" 7, 1907.	77 00
" Immig. Building "	" "	" 7, 1907.	69 65
Medicine Hat, Construction of Armoury	A. P. Burns	Nov. 15, 1907.	16,600 00
" Post Office. Heating apparatus.	Regina Plumbing & Heating Co., Ltd	Mar. 17, 1908.	1,475 00
Red Deer, Court House. Heating, additional coils.	Standard Plumbing & Heating Co	Nov. 25, 1907.	800 00
Saskatchewan.			
Carnduff, Immig. Building. Supply of coal	Fairbairn Bros	Oct. 1, 1907.	.....
Forest Nursery Station "	Hunter, Cantelon & Co	" 1, 1907.	.....
Indian Head, Experimental Farm "	"	" 1, 1907	604 50
Maple Creek, Post Office. Construction of	Snyder Bros	Jan. 5, 1908.	20,600 00
Moose Jaw " Supply of coal.	J. A. Simington	Oct. 8, 1907.	4,425 00
Prince Albert, Lands Office. Fittings	Office Specialty Mfg. Co., Ltd	June 18, 1907.	.....
Regina, Post Office. Supply of coal	The Smith & Ferguson Co.	Oct. 1, 1907.	153 50
" " Electric wiring	The Summers & Kelly Co.	Aug. 26, 1907.	1,700 00
" Dominion Lands Office. Supply of coal	The Smith & Ferguson Co		
" Post Office "	Whitmore Bros	Oct. 1, 1907.	362 28

No. 1.—Contracts let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
Public Buildings—*Concluded.*			$ cts.
Saskatchewan—Continued.			
Saskatoon, Public Building. Electric light wiring, &c	O. L. Lemery	Jan. 27, 1908.	1,478 00
" Construction of a Public Building	J. McDiarmid Co., Ltd	June 21, 1907.	64,500 00
Yorkton, Immig. Building. Supply of coal	D. E. Adams Coal Co	Sept. 13, 1907.	
British Columbia.			
Cumberland. Construction of a Post Office, &c., Building	Edward Hunt	Nov. 26, 1907.	25,000 00
Fernie. Construction of a Public Building	J. G. & M. McCallum	April 9, 1907.	43,750 00
Ladysmith. Construction of a Post Office	Parfitt Bros	Feb. 3, 1908.	28,353 00
Osoyoos. Construction of barn and yard	D. A. Carmichael	Oct. 29, 1907.	540 00
Quesnel. Construction of Telegraph Office	J. Strand	Aug. 26, 1907.	2,000 00
Victoria. Construction of Immig. Building	Luney Bros	Jan. 23, 1908.	63,140 00
William Head, Quarantine Station. Disinfecting tank	Victoria Machinery Depot Co., Ltd	Mar. 16, 1908.	14,000 00
Harbours & Rivers.			
Nova Scotia.			
Arisaig, Dredging	Beazley Bros	Aug. 28, 1907.	Sched.
†Bay St. Lawrence. Boat harbour	Hugh McDonald	Sept. 11, 1907.	24,550 00
Breton Cove. Extension to landing pier	W. J. Landry	Oct. 28, 1907.	5,788 00
Cape St. Mary. Extension to breakwater	E. R. Reid	Nov. 22, 1907.	9,735 00
Lunenburg. Dredging	The W. J. Poupore Co., Ltd.	July 2, 1907.	Sched.
Mahone Bay. "	" "	" 2, 1907.	"
New Glasgow. Extension to High Comr's wharf	J. W. Dobson	Mar. 12, 1908.	3,990 00
Petpeswick. Dredging	Beazley Bros	Aug. 29, 1907.	Sched.
Port Dufferin. "	"	" 29, 1907.	"
Port Royal. Construction of public wharf	Thos. D. Morrison	Mar. 23, 1908.	4,775 00
Portuguese Cove. Construction of breakwater	Reid & Archibald	Dec. 9, 1907.	8,940 00
Scotch Cove, White Point. Breakwater	"	Mar. 19, 1908.	28,935 00
Selma. Block & span wharf	H. MacAloney	Nov. 22, 1907.	6,955 00
Sheet Harbour. Dredging	Beazley Bros	Aug. 29, 1907.	Sched.
Tancook Island. Breakwater	A. E. Girroir & K. Sweet	Nov. 15, 1907.	20,670 00
Prince Edward Island.			
McPherson's Cove. Extension to wharf	F. S. Macdonald	Nov. 5, 1907.	4,289 00
St. Peter's Harbour, Extension of breakwater	R. N. Cox & F. A. Webster	Oct. 30, 1907.	13,500 00
New Brunswick.			
Dalhousie. Rebuilding and enlargement of ferry wharf	J. & A. Culligan	Nov. 14, 1907.	9,840 00
Dorchester. Extension to public wharf	W. & O. Downey	Jan. 20, 1908.	16,184 50
Great Salmon River. Extension to breakwater	T. P. Charleson	Nov. 27, 1907.	6,990 00
Mills Point. Wharf	A. F. Fawcett	Feb. 6, 1908.	19,825 00
Mispec. Extension to eastern breakwater	Wm. R. Fawcett	May 6, 1907.	6,800 00
North Head, Grand Manan. Combined breakwater & wharf	E. R. Reid	June 11, 1907.	26,460 00
Petit Rocher. Extension to shore from breakwater	Simon McGregor	Sept. 4, 1907.	24,150 00
St. John. Dredging	Dominion Dredging Co., Ltd	Dec. 4, 1907.	Sched.
" Rodney Slip. Dredging	" "	Jan. 11, 1908.	"

† Contract, transferred to D. G. Kirk. See order in council, ref. 320,077.

No. 1.—CONTRACTS let by the Department of Public Works of Canada, &c.—*Continued.*

Works	Names of Contractors.	Date of Contract.	Amount.
HARBOURS AND RIVERS—*Continued.*			$ cts.
Quebec.			
Agnès. Construction of landing pier at	A. A. Lapointe Bros	Oct. 23, 1907.	4,600 00
Batiscan River. Dredging	The W. J. Poupore Co., Ltd.	July 2, 1907.	Sched.
Bécancourt River. Dredging	Turcotte & Dufresne	" 20, 1907.	"
Bic (Rimouski). Construction of wharf	Tremblay, Boivin & Co	Aug. 14, 1907.	29,900 00
Blanche Shoals. Dredging	The T. F. Moore Co	July 23. 1907.	Sched.
Bonaventure. Training pier	Alp. Noel & N. H. Roy.	Jan. 25. 1908.	24.500 00
Chateauguay River. Dredging	General Construction Co.	July 2, 1907.	Sched.
Chicoutimi. Extension to wharf	Thadée Desbiens	Jan. 27, 1908.	55,455 00
Dorion. Dredging	L. Cohen & Son	July 9, 1907.	Sched.
East Templeton. Public wharf	John Lowrey	" 25, 1907.	6,994 00
Godefroy River. Dredging	Antoine St. Pierre	" 20, 1907.	Sched.
Hay Island. Dredging	General Construction Co.	" 2, 1907.	"
Hudson. Dredging	Dominion Dredging Co., Ltd	" 2, 1907	"
Laprairie (River St. Jacques). Two ice piers	J. O. & J. A. Lefebvre	Dec. 24, 1907.	7,023 00
L'Anse à la Barbe. Constrution of a wharf	J. Burns & T. P. Charleson.	Jan. 14, 1908.	11,300 00
L'Assomption River. Dredging	P. Gilbert	July 8, 1907.	Sched.
" " St. Paul de Joliette. Ice pier.	A. E. Pontbriand	Jan. 10, 1908.	4,850 00
Maskinongé River. Dredging	L. Cohen & Son	July 9, 1907.	Sched.
Montmagny. Wharf	Elz. Boulanger & Son	Dec. 30, 1907.	11,500 00
Nicolet River. Dredging	The St. Lawrence & Great Lakes Dredging Co., Ltd.	July 20, 1907.	Sched.
Piché Point. Construction of a public wharf	F. Brewder	Feb. 3, 1908.	8,700 00
Pointe aux Trembles. Completion of wharf	O. Poliquin	" 2, 1908.	22,490 00
Pointe Cavagnale. Dredging	L. Cohen & Son	July 9, 1907.	Sched.
Port St. Francis "	"	Oct. 17, 1907.	"
Raquette River. "	"	July 9, 1907.	"
Rimouski River. "	General Construction Co.	" 2, 1907	"
River du Loup (en haut) Dredging	St. Lawrence & Great Lakes Dredging Co., Ltd	" 20, 1907.	"
River Jésus. Dredging	General Construction Co.	" 2, 1907.	"
River Ouelle. "	" "	" 2, 1907.	"
St. Alphonse de Chicoutimi. Extension to wharf	J. Heney & H. Smith.	Nov. 27, 1907.	38,350 00
St. Andrews (North River). Dredging	Dominion Dredging Co., Ltd	July 2, 1907.	Sched.
St. Charles de Limoilou. Landing and protection wall	F. F. McLaughlin	Sept. 16, 1907.	2,600 00
St. Francis River. Dredging	The W. J. Poupore Co., Ltd.	July 2, 1907.	Sched.
St. Francis, I. O. Approach to crib	Nap. Trudel	Feb. 11, 1908.	16,038 00
St. Ignace de Loyola. Landing pier	Eugène Patenaude	Nov. 18, 1907.	10,800 00
St. Maurice River. Dredging	Antoine St. Pierre	July 20, 1907.	Sched.
St. Omer, Bonaventure Co. Public wharf	P. Nadeau & Sons & N. Arseneau.	Jan. 28, 1908.	12,400 00
St. Pierre les Becquets. Dredging	The St. Lawrence & Great Lakes Dredging Co., Ltd.	July 20, 1907.	Sched.
St. Placide. Dredging	L. Cohen & Son	" 9, 1907.	"
St. Siméon. Head block at wharf	Nap. Trudel	Dec. 18, 1907.	16,900 00
Saguenay River. Dredging	General Construction Co.	July 2, 1907.	Sched.
Sorel. High level wharf. Additional front to	J. E. Beauchemin	Aug. 7, 1907.	125,000 00
Sorel. Dredging	L. Cohen & Son	July 9, 1907.	Sched.
Vaudreuil. Dredging	Dominion Dredging Company, Ltd	" 2, 1907.	"
Yamaska River. Dredging	The W. J. Poupore Co., Ltd.	" 2, 1907.	"
Ontario.			
Blind River. Dredging	C. S. Boone	July 2, 1907.	"
Bronte Harbour. Dredging	W. E. Phin	" 5, 1907.	"
Chatham. St. Joseph's Hospital. Retaining wall.	John Flook	Dec. 4, 1907.	3,562 50
Chatham. McGregor's Creek. Retaining wall	"	" 4, 1907.	2.065 50
Chatham. Tecumseh Park. Retaining wall	"	" 4, 1907.	2,052 34
Cobourg. Dredging	W. E. Phin	July 5, 1907.	Sched.
Colborne. Wharf and stone approach	G. Kastner & D. Porter	Nov. 8, 1907.	12,990 00
Collingwood Harbour. Dredging	C. S. Boone	Dec. 4, 1907.	Sched.

No. 1.—Contracts let by the Department of Public Works of Canada, &c.—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
Harbours and Rivers—*Concluded.*			$ cts.
Ontario—Continued.			
Dark Channel. Dredging	The St. Lawrence & Great Lakes Dredging Co., Ltd.	Aug. 19, 1907.	Sched.
Goderich. Dredging	W. L. Horton	July 3, 1907.	"
Goderich. Completion of breakwater	Wm. Bermingham	Jan. 23, 1908.	94,700 00
Hamilton. Burlington Channel. Pier head	Joseph Battle	June 20, 1907.	9,490 00
Hamilton. Dredging	W. E. Phin	July 5, 1907.	Sched.
Kincardine. Dredging	W. L. Horton	" 3, 1907.	"
Lion's Head. Extension to wharf	G. Kastner & D. Porter	Dec. 6, 1907.	6,990 00
Meaford. Dredging	R. Weddell & Co.	July 6, 1907.	Sched.
Meaford Harbour. Construction of works	Joseph Battle	Jan. 21, 1908.	34,742 87
Midland. Dredging	The Canadian Dredge & Construction Co., Ltd.	July 9, 1907.	Sched.
Midland (Tiffin). Dredging	The Owen Sound Dredge & Construction Co., Ltd.	" 16, 1907.	"
Owen Sound. "	A. F. Bowman	June 29, 1907.	"
Penetanguishene. "	"	" 29, 1907.	"
Point Edward. "	Manley & Co.	" 25, 1907.	"
Port Burwell. "	Canada Construction & Dredging Co., Ltd.	Aug. 24, 1907.	"
Port Colborne. Supply of stone and blocks	M. J. Hogan	Sept. 16, 1907.	46,500 00
Port Elgin. Dredging	W. L. Horton	July 3, 1907.	Sched.
Port Hope. "	W. E. Phin	Nov. 19, 1907.	"
Port Stanley. "	Canada Construction & Dredging Co., Ltd.	Aug. 24, 1907.	"
Port Stanley. "	" "	Feb. 10, 1908.	"
Rainy River. "	J. J. Lyons & Jas. Whyte	Sept. 23, 1907.	"
Rondeau. "	Canada Construction & Dredging Co., Ltd	Aug. 24, 1907.	"
Rossport. Construction of crib wharf	Charles H. Sherwood	Feb. 2, 1908.	7,288 00
Sand Point. Construction of public wharf	J. J. Fallon	Dec. 19, 1907.	6,254 00
Sault Ste. Marie. Dredging	A. F. Bowman	April 5, 1907.	Sched.
Southampton. Extension to wharf	G. Kastner & D. Porter	Dec. 6, 1907.	41,000 00
Summerstown. Dredging	L. Cohen & Son	Oct. 17, 1907.	Sched.
Thames River. "	Manley & Co.	June 25, 1907.	"
Thornbury. "	R. Weddell & Co	July 6, 1907.	"
Toronto. "	The Windsor Dredging Co., Ltd.	" 9, 1907.	"
Trenton Harbour. "	The St. Lawrence & Great Lakes Dredging Co., Ltd.	Aug. 19, 1907.	"
Victoria Harbour. "	The Owen Sound Dredge & Construction Co., Ltd.	June 7, 1907.	"
White Cloud Island. Wharf and stone approach	Johnston, Hunter & Crawford	Dec. 28, 1907.	4,000 00
Wiarton. Dredging	A. F. Bowman	June 29, 1907.	Sched.
Wingfield. Basin. Dredging	C. S. Boone	July 12, 1907.	"
Waubaushene. "	A. F. Bowman	June 29, 1907.	"
Manitoba.			
St. Andrew's Rapids. Dams. Supply of 20,000 barrels of cement	The Owen Sound Portland Cement Co., Ltd.	June 29, 1907.	Per brl. 3 19
Shellmouth. Superstructure of steel highway bridge	The Algoma Steel Bridge Co., Ltd.	Oct. 23, 1907.	20,400 00
Vessels, Dredges and Plant.			
Construction of a steam tug for Dredge No. 2, River du Lièvre	The W. H. Kelly Lumber Co.	April 17, 1907.	6,300 00
Construction of two (2) scows for British Columbia	Wm. Turpel & Son	Aug. 10, 1907.	35,550 00
Construction of hull for tug *Sir Hector*	R. J. Morrill	Nov. 4, 1907.	7,000 00

No. 1.—CONTRACTS let by the Department of Public Works of Canada, &c.—*Concluded.*

Works.	Names of Contractors.	Date of Contract.	Amount.
VESSELS, DREDGES AND PLANTS—*Continued.*			
Supply of steel castings for dam, etc., at St. Andrew's Rapids, Man	The Montreal Steel Works, Ltd	Jan. 17, 1908.	Sched.
Supply of 350 cords of wood, for dredge *Lac St. Jean*	Louis Desbiens	Feb. 7, 1908.	1,400 00
Additions and alterations to dredge *Sir Wilfrid Laurier*	Polson Iron Works, Ltd	" 18, 1908.	50,000 00

No. 2.—STATEMENT of properties purchased by the Department of Public Works from April 1, 1907, to March 31, 1908.

Date of Conveyance.	Vendors.	Purchasers.	Description of Property.	For what Purpose.	Area.	Price.
1907.						$ cts.
April 3	Corporation of Kincardine	His Majesty	South part of South, 100 ft. lot No. 1, Kincardine, Ont.	Gov't. purposes		2 00
" 28	T. Cournoyer	"	Part of lot 57, Sorel, P.Q.	Ice Breakers	3,600 sq. ft.	15 00
May 2	Mary Chisholm, *et al*	"	Land at Bailey's Brook, N.S.	Protection works	3,124 sup. ft	40 00
" 2	James McDonald	"	Land at Bailey's Brook, N.S.	Protection works	28,080 "	20 00
" 13	J. H. Kern	"	Lot 59, Main St., Winnipeg, Man	Site Pub. Building		3,500 00
" 15	Governor of Toronto University	"	Land and premises, N. 25 ft. from front to rear of lot 22, and all of lots 23, 24, Toronto City	Meteorological Service		1 00
" 20	Mrs. Finlayson	"	Portion of lot 59, Prince Albert, Sask	Penitentary		
" 22	Nap. Harbec	"	Part of lot No. 133, Ste. Blaise, Que.	Public Building	50,000 sq. ft	400 00
" 25	Elz. Savard	"	Lands, North Shore River, St. Charles, Que.	Trachoma Hospital	115 x 130 ft.	5,000 00
" 25	Alf. Dickie, *et ux*	"	Land—Three Fathom Harbour, N.S.	Boat Channel	1 53/100 acres	30 60
" 25	Town of Nicolet	"	Cadastral lot 365, Nicolet, P.Q.	Public Building	6,175 ft	Free grant.
" 30	W. E. Gladstone	"	Lot No. 58, Prince Albert, Sask	Penitentiary		7,932 50
June 10	Gazette Printing Co.	"	Land—corner of Craig, St. Frs. Xavier & Forification Lane, Montreal, P.Q.	Post Office		200,000 00
" 12	H. Patterson, *et ux*	"	Land at Three Fathom Harbour, N.S.	Wharf	0 222/1000 acre	5 00
" 12	Thomas Gaetz, *et ux*	"	Land at Three Fathom Harbour, N.S.	"	35/1000 acre	13 00
" 12	Geo. E. Graham, *et ux*	"	Land at Three Fathom Harbour, N.S.	"	16/100 acre	6 00
" 12	Geo. Lapierre	"	Land at Three Fathom Harbour, N.S.	"	204/1000 acre	50 00
" 15	Dominion Fish Co., Ltd	"	Lots 10, 11, West Selkirk, Man	"		Free grant.
" 17	R. S. Cook	"	River lot No. 57, Prince Albert, Sask	Penitentiary		7,505 00
" 18	Acadia Coal Co., Ltd.	"	Land at Westville, N.S.	Public Building		2,000 00
July 2	O. Baird, *et ux*	"	Lot No. 19, Parkhill, Ont	Armoury		145 00
" 4	Télesphore Thouin	"	Land at Repentigny, P.Q.	Wharf	41,000 sq. ft.	100 00
" 6	Alfred N. Leslie, *et ux*	"	Land at Spry Bay, N.S.	"	25 x 58 ft.	100 00
" 9	A. Mallette	"	Land and wharf, Rigaud, P.Q.	"	116 x 125 ft.	3,000 00
" 17	Elizabeth Frs. Dobell	"	Lot letter 'O' Sussex St, Ottawa, Ont.	Gov't. purposes		10,000 00
Aug. 6	M. Culligan, *et ux*	"	Land at Durham, N.B.	Wharf	44/100 acre	50 00
" 7	Louis Réhel	"	Land—Anse a l'Ilot, Gaspé Co., Que.	Right of way	1,034 ft. l. 24 ft. w	Donation.
" 10	Geo. T. Bonner	"	Signioral taxes on land at St. Simeon, P.Q.	Wharf (Redemption of)		8 27
" 15	Francis Foster	"	Land at St. Simeon, Que.	Approach to wharf	5,220 ft	120 00
" 17	Henri Savard	"	Land at St. Simeon, Que.	Approach to wharf	7,175 ft	50 00
" 19	D. Reid	"	Land at Port Hilford, N.S.	Breakwater	1,126 sup. ft	25 00

No. 2.—STATEMENT of properties purchased by the Department of Public Works from April 1, 1907, to March 31, 1908—*Continued.*

Date of Conveyance.	Vendors.	Purchasers.	Description of Property.	For what Purpose.	Area.	Price.
1907.						
Aug. 26	J. L. Gosselin	His Majesty	Land at Plessisville, P.Q.	Public Building	150 by 160 ft.	2,800 00
" 27	Ontario Bank	"	Water lot fronting west half of lot 3, &c. Fort William, Ont.	Kaministiquia River Improvements		Expropriation.
" 27	Estate of J. M. Walsh.	"	Water lot in front of N.W. half lot 6, Conc. F. Fort William, Ont.	Kaministiquia River Improvements		"
" 27	Enoch Brown	"	Water lot fronting E. half lot 3, Fort William, Ont.	Kaministiquia River Improvements		"
" 27	Estate of J. M. Walsh.	"	Part of lot 8, Conc. D. Fort William, Ont.	Kaministiquia River Improvements		"
" 27	Ontario Bank	"	Part of E. half lot 6, Conc. F. Fort William, Ont.	Kaministiquia River Improvements		"
" 27	Estate of J. M. Walsh.	"	Part of half lot 6, Conc. F. Fort William, Ont.	Kaministiquia River Improvements		"
" 28	Amanda Doucet, *et al.*	"	Land at St. Angèle de Laval, Que.	Wharf	13,833 ft.	1,000 00
" 30	John Cuzner, *et ux.*	"	Lot letter 'Q' Sussex St. Ottawa, Ont.	Gov't. purposes		17,000 00
" 31	His Majesty	Ottawa Wine Vault	Strip of land, north side of George St. Ottawa, Ont.	Private enterprise	5 x 166 ft.	660 05
Sept. 3	J. & D. Sewell, *et al.*	His Majesty	Lot No. 12, Markham, Ont.	Public Building		1,000 00
" 6	F. X. Lemieux, *et ux.*	"	Lot No. 11, W. side, Sussex St. Ottawa, Ont.	Gov't. purposes		5,600 00
" 9	P. P. Poirier, *et ux.*	"	Land at Poirierville, N.S.	Wharf	14,200 sq. ft.	290 00
" 20	Provincial Government to Federal Government		Water lot—Broken Section—No. 18, Echo Bay, Ont.	"	23 acres	Transfer.
" 27	D. & W. McDonald, *et uxores*	His Majesty	Land at Vernon, River Bridge, P.E.I.	"		200 00
Oct. 3	Andrew Kelly	"	Land and premises, Barkerville, B.C.	Gov't. purposes		200 00
" 4	Flora Jane Veale	"	Part of lot 15, Conc. 6, Beaverton, Ont.	Harbour Imprvts.	$\frac{32}{100}$ acres	1 00
" 25	His Majesty	Paul Fourigny	Strip of land, Victoriaville, Que.	Private enterprise		57 00
" 28	G. H. Reid.	His Majesty	Lots Nos. 1 and 2, Little Harbour, N.S.	Wharf	41,470 ft.	150 00
" 29	Municipality of Knowlton	"	Land at Knowlton, Que.	Public Building	6,270 sq. ft.	300 00
Nov. 9	P. D. Keith	"	Lots 4 and 5 at Glencoe, Ont.	"		1,250 00
" 12	D. B. MacLennan	"	Land—Stanley Island, Ont.	Wharf	8,118 sq. ft.	500 00
" 21	G. Lamirande	"	Part of lot 4-5, Louisville, Que.	"	13,194 sq. ft.	375 00
Dec. 4	O. Wright, *et al.*	"	Lots Nos. 15 and 16, Renfrew, Ont.	Public Building		5,000 00
" 11	S. Burke	"	Land—Scotch Cove (White Point) N.S.	Wharf	28,900 sq. ft.	250 00
" 14	Abraham Girroir, *et ux.*	"	Land and wharf, Port Royal, N.S.	"	5,000 sq. ft.	275 00
" 20	R. J. & J. T. Mutrie	"	Lots 51, 52 and buildings, Block 52, Vernon, B.C.	Public Building		5,000 00

"	26	Catharine D. Barclay	"	Lots 15, 16, Whitby, Ont	"		5,000 00
"	30	La Cie de Navigation, Richelieu & Ontario.	"	Land and wharf, St. Sulpice, Que	Wharf	Wharf 5,030 ft. Land 4,575 ft.	2,300 00
1908.							
Jan.	7	Grey Nuns	"	Land lot No. 3, Montreal, Que	Custom House	67,800 ft	402,000 00
"	17	Dr. D. R. Davies	"	Lots 1, 2, 3, Block 43, Estevan, Sask	Public Building		2,000 00
"	22	Corporation of Welland	"	Part of lots J.D. East side Welland Canal, Ont	"		6,000 00
"	22	H. Weller	"	Part of lots W.M. Welland, Ont	"		300 00
"	23	His Majesty	R. C. E. Corporation of Diocese of Kingston, Ont	Lots 32, 33, west side of Rear St. Belleville, Ont.	Drill Hall	1 $\frac{94}{100}$ acre	1,150 00
"	25	John Alexander	His Majesty	Lot No. 352, Anse à la Barbe, Que	Wharf	4,245 sq. ft.	25 00
"	25	Auguste Morin	"	Lots 356-7-8, Anse à la Barbe, Que	"		175 00
"	27	Duncan Gillis	"	Land at Judique, N.S	Right of way	5,360 sup. ft	1 00
"	27	Arthur Brown, *et ux.*	"	Lot No. 8, Leamington, Ont	Gov't. purposes		500 00
"	27	Enoch Windsor	"	Lots 5-6-7, Leamington, Ont	"		2,000 00
"	29	James McAllister	"	Land at Chute à Blondeau, Ont.	Wharf	12,162 sq. ft.	800 00
Feb.	11	Nap. Allard	"	Cadastral lot No. 11a, 1st Range, St. Omer, Que.	Right of way	31,000 sq. ft.	100 00
"	14	Levi Beck	"	Lots 21, 22, Block 3, Yorkton, Sask	Public Building		4,000 00
"	24	Albert Hager, *et ux.*	"	Dam property, lots 10, 11, South Nation River, Ont.	Improvements		15,000 00
March	9	J. A. Lavoie	"	Lot 120, St. Germain de Rimouski, Que	For wharf	3,156 sq. ft.	100 00
"	11	F. W. Iredale	"	Lot 16, &c. Dauphin, Man	Public Building		6,000 00
"	14	Provincial Government	Federal Government	Old Ferry Wharf at Dalhousie, N.B	Site for new wharf		Free transfer.
"	16	His Majesty	Arthur Doig	Old Immg. Building at Birtle, Man	Private enterprise		165 00
"	17	The Polson Iron Works Ltd	His Majesty	Sale of steam screw Hercules	Gov't. purposes		62,500 00
"	20	His Majesty	Anten Iverson	Old Immg. Building, at Minnedosa, Man	Private enterprise		125 00
"	23	Provincial Government	Federal Government	Land at Point Piché, Que	Wharf	$\frac{1}{2}$ acre	0 15
"	26	Angus McLean	His Majesty	Lot No. 489, Bonaventure Beach, Que.	"		1 00
"	26	Corporation of Cookshire	"	Lots Nos. 11, 17, Range 8, Cookshire, Que	Public Building		Free grant.
"	30	Martha Macpherson, & vir	"	Land at McPherson's Cove, N.S	Wharf	315,000 sq. ft.	30 00

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, October 10, 1908.

J. A. CHASSÉ,
Law Clerk.

STATEMENT of Properties Leased to and by the Department of Public Works from the 1st day of April, 1907, to the 31st day of March, 1908.

Date of Lease.	Lessors.	Lessees.	Property Leased.	For what Purpose.	Duration of Lease.	Annual Rental.
1907.						$
April 11	C. P. Railway Co.	His Majesty	Land at Calgary, Alta.	Immigration purposes	1 year	10 00 p. a.
" 15	The North Battleford Curling Rink Co.	"	Building at North Battleford, Sask.	" "	Monthly tenancy	15 00 p. m.
May 1	His Majesty	A. Bureau & Bros.	Premises No. 550 Sussex street, Ottawa, O.	Printing office	1 year	25 00 p. m.
" 1	"	*Le Temps* Printing Co.	Premises No. 552 Sussex street, Ottawa, O.	"	"	156 00 p. m.
" 6	Rodier Estate	His Majesty	House on St. Antoine street, Montreal, P.Q.	Immg. purposes	"	2,000 00 p. a.
" 6	The C. P. Railway Co.	"	Space "C" Windsor Station, Montreal	Storage of mails	"	213 00 p. a.
" 7	C. Turcotte	"	Premises No. 838 St. Valier street, Quebec	Post Office	4 years	400 00 p. a.
" 8	E. L. Poulin	"	Building at Vegreville, Alta.	Immg. purposes	Monthly tenancy	40 00 p. m.
" 9	Margaret M. Keane	"	Building at Battleford, Sask.	"	1 year	240 00 p. a.
" 17	Wm. Grayson	"	Lease of rooms, Grayson's Block, Moose Jaw, Sask.	Govt. purposes	Monthly tenancy	40 00 p. m.
" 18	Town of MacLeod	"	Portion of School house, MacLeod, Alta.	"	"	25 00 p. m.
June 1	His Majesty	B. Davis	Premises Nos. 414 and 416 Sussex street, Ottawa	Private enterprise	"	20 00 p. m.
" 15	Gildersleeve Estate	His Majesty	Building on Market Square, Kingston, O.	For Depts. of Inland Rev., &c.	21 years	1,762 00 p. a.
" 21	Geo. MacAulay	"	Lease of house at Dawson	For Commissioner Henderson	1 year	200 00 p. a.
July 20	Shawinigan Water and Power Co.	"	Strip of land at St. Maurice River, P.Q.	Govt. booms	"	10 00 p. a.
" 20	Credit Foncier Franco-Canadien	"	Rooms in C. F. F. C. Building, Edmonton, Alta.	Govt. purposes	"	852 00 p. a.
August 1	The Molsons Bank	"	Basement—Molsons Building, Ottawa, O.	Labour Dept.	26 months	15 00 p. m.
" 8	A. Leask	"	Building 12 x 30 ft. Battleford, N. Sask.	Immg. purposes	1 year	240 00 p. a.
" 9	His Majesty	General Construction Co.	Lease of two scows	Dredging at Chicoutimi, P.Q.	3 months	800 00 p. m.
" 24	J. J. Banfield	His Majesty	Offices at Vancouver, B.C.	For Marine Dept.	During pleasure.	20 00 p. m.
" 31	Masonic Temple	"	Room, Regina, Sask.	For P. W. Dept.	"	25 00 p. m.
Oct. 1	C. P. Railway Co.	"	Rooms, Station and Hotel, Winnipeg, Man.	For Postal Stat. "A"	2 years	2,050 00 p. a.
" 12	Wm. McCullough	"	Premises No. 439 Wellington street, Montreal, P.Q.	Letter Carriers Depot	3 years	300 00 p. a.
" 16	His Majesty	Corporation of Parry Sound	Govt. Wharf at Parry Sound, Ont.	Public enterprise	21 years	1 00 p. a.
" 25	"	St. Maurice Lumber Co.	Land at St. Christophe Island, P.Q.	Lumber business	"	25 00 p. a.
" 26	"	Board of Harb. Comrs. of Three Rivers, P.Q.	Govt. Wharf, "Quai Bureau," Three Rivers, P.Q.	Public purposes	"	1 00 p. a.

Nov.	1	C. P. Railway Co.	His Majesty	Room, Windsor Station, Montreal, P.Q.	For Mail purposes	1 year	213 00	p. a.
"	20	J. C. Brennan	"	Rooms, "Trafalgar Building," Ottawa, Ont.	Interior Dept.	2 years	2,200 00	p. a.
"	25	Municipality St. Anne de Bellevue	"	Rooms in Municipal Building, Ste. Anne de Bellevue.	For Post Office	1 year	100 00	p. a.
Dec.	9	C. McCall	"	Premises Nos. 4,200, &c., St. Catherines st., Montreal.	For Letter Carriers	3 years	1,200 00	p. a.
"		E. Beausoleil	"	Building, St. Gabriel de Brandon, P.Q.	For Post Office	5 years	200 00	p. a.
1908.								
Jan.	1	Jas. E. McCormick	"	Ground floor building, Grand Falls, N.B.	For Post Office	1 year	120 00	p. a.
"	14	J. A. Corry	"	Lease of 4, 5 and 6 flats, "Corry Building," Ottawa	Govt. Offices	4 years & 9 mos.	10,200 00	p. a.
"	20	G. F. Brennan *et al*	"	Lease of "Martello Hotel property," St. John, N. B.	For Hospital	5 years	1,672 50	p. a.
"	30	The Dominion Coal Co., Ltd.	"	Land, Glace Bay Beach, N.S. (23,760 square feet)	Protection works	20 years	1 00	p. a.
Feb.	1	The G. T. Ry. Co.	"	Portion of Union Station, Toronto, Ont.	Immg. purposes	1 year	1,000 00	p. a
"	1	His Majesty	Edward Pagé	Premises No. 540 Sussex street, Ottawa, Ont.	Private enterprise	Monthly tenancy	25 00	p. m.
"	1	"	Auguste D'Amour	Premises Nos. 546 and 548 Sussex street, Ottawa, Ont.	"	"	30 00	p. m.
"	14	Ontario Bank	His Majesty	Main room, old Ontario Bank building, Toronto, Ont.	Cust. Postal Services	"	150 00	p. m.
"	18	A. E. Sinclair & J. Glover	"	Premises 157 Portage avenue, East Winnipeg, Man.	Cust. Dept.	1 year	1,200 00	p. a.
March	6	His Majesty	John Holzman	Premises Nos. 83, 87 Mackenzie avenue, Ottawa	Private enterprise	Monthly tenancy	35 00	p. m.
"	15	School District of Virden	His Majesty	Lease of building at Virden, Man.	Immg. purposes	1 year	250 00	p. a.
"	20	His Majesty	John Reid	Lot 1, Block 13, New Westminster, B.C.	Private enterprise	10 years	100 00	p. a.
"	24	John Burn	His Majesty	Lease of building at Sedgewick, Alta.	Immg. purposes	7 months	210 00	whole period
"	27	Geo. W. Abbott	"	Building at Vegreville, Alta	"	Monthly tenancy	40 00	p. m.

Department of Public Works,
Ottawa, October 10, 1908.

J. A. CHASSÉ,
Law Clerk.

NATIONAL ART GALLERY

CURATOR'S REPORT

FOR THE FISCAL YEAR ENDED MARCH 31, 1908

NATIONAL ART GALLERY.

D. Ewart, Esq., I.S.O.,
Chief Architect.

Sir,—I have the honour to report the following addition, by purchase, to the collection during the fiscal year ended March 31, 1908, at a cost of $1,000, viz.:—

Portrait of the Right Honourable Sir John A. Macdonald, painted by F. A. Verner, R.C.A. The painting is hung in the drawing-room of the Speaker of the House of Commons.

Eleven thousand eight hundred and ninety visitors registered at the gallery during the fiscal year.

I have the honour to be, sir, your obedient servant,

WALTER R. BILLINGS,
Acting Curator, National Art Gallery.

Ottawa, October 13, 1908.

NAMES OF THE CHIEF OFFICERS

OF THE

DEPARTMENT OF PUBLIC WORKS

WITH

DATES OF APPOINTMENT, ETC., FROM 1841 to 1908.

NAMES OF THE CHIEF OFFICERS.

The names and dates of the appointment, &c., of the principal Officials of the Department of Public Works, from 1841 to 1908.

Names.	Capacity or Office.	Date of Appointment. Served. From	To
Under Statute 4-5 Vic., Chap. 38.			
CORPORATION BOARD OF WORKS.			
Killaly, Hon. H. H.	Chairman		
Daly, Hon. D.	Members.	Dec. 29, 1841	Oct. 3, 1844
Harrison, S. B			
Sullivan, R. B.			
Davidson, J. Esq			
Begly, Thomas A	Secretary	Aug. 17, 1841	
Keefer, Samuel	Chief Engineer	" 17, 1841	
Rubidge, F. B	Architect and Assistant Chief Engineer	Dec. 15, 1841	
NEW BOARD OF WORKS.			
Killaly, Hon. H. H.	Chairman		
Daly, Hon. D	Members	Oct. 4, 1844	June 8, 1846
Draper, Hon. W. H			
Morris, Hon. W.			
Papineau, Hon. D. B			
Under Statute 9th Vic., Cap. 37, &c.			
Robinson, Hon. W. B	Chief Commissioner	June 22, 1846	March 10, 1848
Taché, Hon. E. P.	"	March 11, 1848	Nov. 26, 1849
Chabot, Hon. J.	"	Dec. 13, 1849	March 31, 1850
Merritt, Hon. W. H.	"	April 8, 1850	Feb. 11, 1851
Bourret, Hon. J.	"	Feb. 12, 1851	Oct. 27, 1851
Young, Hon. John	"	Oct. 28, 1851	Sept. 22, 1852
Chabot, Hon. J.	"	Sept. 23, 1852	Jan. 26, 1855
Lemieux, Hon. F.	"	Jan. 27, 1855	Nov. 25, 1857
Alleyn, Hon. C.	"	Nov. 26, 1857	Aug. 1, 1858
Holton, Hon. L. H.	"	August 2, 1858	" 6, 1858
Sicotte, Hon. L. V.	"	" 7, 1858	Jan. 10, 1859
Rose, Hon. John	"	Jan. 11, 1859	June 12, 1861
Cauchon, Hon. Jos	Commissioner	June 13, 1861	May 23, 1862
Tessier, Hon. U. J.	"	May 24, 1862	" 27, 1863
Drummond, Hon. L. T	"	" 28, 1863	July 23, 1863
Laframboise, Hon. M.	"	July 24, 1863	March 29, 1864
Chapais, J. C.	"	March 30, 1864	June 30, 1867
Casgrain, Hon. Chas. Eus.	Second Commissioner	July 9, 1846	Feb. 29, 1848
Cameron, Hon. M.	Assistant Commissioner	March 11, 1848	" 1, 1850
Wettenhall, James Esq.	"	Feb. 2, 1850	April 16, 1850
Bourret, Hon. Jos.	"	April 17, 1850	Feb. 11, 1851
Killaly, Hon. H. H.	"	Feb. 12, 1851	May 6, 1859
Keefer, Samuel	Deputy Commissioner	May 6, 1859	March 7, 1864
Trudeau, Toussaint.	"	March 8, 1864	May 29, 1868
Begley, Thos. A.	Secretary	Feb. 10, 1841	Oct. 31, 1858
Trudeau, Toussaint.	"	Dec. 13, 1859	March 7, 1864
Braun, Frederick	"	March 8, 1864	July 1, 1867
Page, John	Chief Engineer	Oct. 31, 1873	Oct. 1, 1879

The names and dates of the appointment, &c., of the principal Officials of the Department of Public Works, from 1841 to 1908—*Continued.*

Names.	Capacity or Office.	Date of Appointment. Served. From	To
Under Statute 31 Vic., Cap. 12.			
McDougall, Hon. Wm	Minister	July 1, 1867	Dec. 7, 1869
Langevin, C. B., Hon. Hector L	"	Dec. 8, 1869	Nov. 6, 1873
Mackenzie, Hon. Alexander	"	Nov. 7, 1873	Oct. 16, 1878
Tupper, C.B., K.C.M.G., Sir Charles	"	Oct. 17, 1878	May 19, 1879
Langevin, C.B., K.C.M.G., Sir Hector L	"	May 20, 1879	Aug. 11, 1891
Smith, Hon. Frank	Acting Minister	Aug. 14, 1891	Jan. 10, 1892
Ouimet, Hon. Joseph Alderic	Minister	Jan. 11, 1892	April 30, 1896
Desjardins, Hon. Alphonse	"	May 1, 1896	July 12, 1896
Tarte, Hon. J. Israel	"	July 13, 1896	Oct. 21, 1902
Sutherland, Hon. James	"	Nov. 11, 1902	May 3, 1905
Hyman, Hon. Charles S	"	May 22, 1905	Aug. 29, 1907
Pugsley, Hon. Wm	"	Aug. 30, 1907	
Trudeau, Toussaint	Deputy Minister	May 29, 1868	Oct. 1, 1879
Baillargé, C. F.	"	Oct. 4, 1879	Dec. 31, 1890
Gobeil, A., I. S. O	"	Jan. 1, 1891	June 2, 1908
Hunter, James B	"	July 1, 1908	
Braun, Frederick	Secretary	" 1, 1867	Sept 30, 1879
Chapleau, S	"	Oct. 1, 1879	Nov. 4, 1880
Ennis, F. H	"	Nov. 5, 1880	Jan. 13, 1885
Gobeil, A.	"	Jan. 23, 1885	Dec. 31, 1890
Roy, E. F. E	"	" 1, 1891	" 31, 1900
Gélinas, Fred	"	June 8, 1901	July 2, 1908
Tessier, Napoleon	"	Aug. 11, 1908	
McPherson, D. A	Assistant Secretary	Jan. 18, 1891	April 11, 1893
Desrochers, Rodolphe, Charles	"	" 8, 1896	
Page, John	Chief Engineer	July 1, 1868	Oct. 1, 1879
Perley, H. F	"	Nov. 25, 1880	July 10, 1891
Coste, Louis	"	July 26, 1892	March 18, 1899
Lafleur, E. D	"	Jan. 7, 1905	
Scott, Thos. S	Chief Architect	May 26, 1871	Oct. 30, 1881
Fuller, Thomas	"	Oct. 31, 1881	June 30, 1897
Ewart, David, I.S.O	"	Nov. 2, 1897	

NAMES

OF THE

OFFICIALS EMPLOYED ON THE SLIDES AND BOOMS OF CANADA

ON MARCH 31, 1908

WITH

DATES OF APPOINTMENT, SALARIES, ETC.

OFFICIALS EMPLOYED ON THE SLIDES AND BOOMS.

STATEMENT showing the Names, Dates of Appointment, Salaries, &c., of persons employed on the various Slides and Booms on March 31, 1908.

Name.	Date of Birth.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
Collector of Public Works Revenue.					$ cts.	
E. T. Smith	Nov. 26, 1846	Collector, chief clerk.	Ottawa	July 1, 1889	1,950 00 a year	Date of first appointment to Crown Timber Office, Ottawa, June 23, 1864. Clerk in Dept. of Inland Revenue, July 1, 1870, to June 30, 1889. Transferred to civil list, with rank of first class clerk, January 5, 1892. Chief clerk, July 1, 1906.
James Steen	June 17, 1830	Boatman	"	July 12, 1889	65 00 a month	Employed during the season of navigation for eight months each year. Date of first appointment, May 26, 1861. Timber counter, Ottawa, for Dept. of Inland Revenue, January 7, 1881, to June 30, 1889.
J. Brassard		"	"	Mar. 1, 1901	65 00 "	Employed during the season of navigation for eight months each year.
Saguenay District.						
G. Bilodeau	Jan. 29, 1841	Boom master	Chicoutimi	May 1, 1906	60 00 "	
Arm. Ouellet	June 15, 1879	" keeper	"	" 1, 1906	40 00 "	
William Dallaire	Oct. 8, 1857	" "	"	Apr. 1, 1907	50 00 "	
Willie Dallaire	Dec. 23, 1882	" "	"	May 1, 1906	40 00 "	
St. Maurice District.						
L. P. Dallaire	June 11, 1866	Paymaster	Three Rivers	" 1, 1898	75 00 "	
Jos. Pagé	July 7, 1845	Boom master	Mouth of St. Maurice	Dec. 10, 1879	75 00 "	
Jos. Dick	Apr. 15, 1848	Asst. boom master	Three Rivers	Apr. 21, 1898	75 00 "	
H. Bourassa	" 15, 1859	" "	Ste. Flore	Dec. 2, 1906	52 00 "	
Moise Masson	Dec. 29, 1845	Boom master	Grandes Piles	Apr. 19, 1898	75 00 "	
N. Lymburner	July 22, 1855	"	Shawenigan Falls	July 1, 1895	75 00 "	
Napoléon Lapointe	Mar. 15, 1872	"	Shawenigan Bay	Nov. 12, 1906	75 00 "	
Pierre Duchaine	Oct. 8, 1856	"	Grand Mère	May 7, 1907	75 00 "	

Ottawa District.								
G. P. Brophy	Feb. 24, 1846	Superintendent	Ottawa	July 6, 1873	2,500 00	a year	*Ottawa River Works.*—In addition to the above officers, &c., there are employed during the running season, one foreman on slide at $1.50, and one assistant foreman at $1.25 a day; also 25 to 30 labourers at $1 to $1.40 a working day.
J. Kent	Jan. 28, 1864	Accountant*	"	Aug. 1, 1886	1,400 00	"	
J. C. Scott	June 27, 1865	Asst. engineer	"	Apr. 1, 1880	5 00	a day	
S. E. Smith	May 29, 1869	Clerk	"	Nov. 7, 1904	2 50	"	
Wm. Cain	Apr. 22, 1860	Messenger	"	Jan. 1, 1892	1 50	"	
Pierre Saint Pierre	Mar. 13, 1853	Deputy slide master	Carillon	June 1, 1897	1 40	"	Actively employed about seven months. Oversees repairs in winter.
D. Noonan	June 17, 1840	Boom master	Gatineau	Mar. 21, 1878	500 00	a year	" "
J. Soulière	Nov. 8, 1829	Deputy slide master	Chaudière	——, 1858	3 00	a day	" "
P. D. Chéné	May 6, 1843	"	Hull	June 14, 1899	1 75	"	Employed about six months.
W. A. Shirreff	Oct. 27, 1842	"	Chats	Apr. 26, 1898	1 50	"	Oversees repairs in winter.
J. Tierney	June 7, 1836	"	Arnprior	Mar. 27, 1908	2 50	"	Actively employed about seven months.
Joseph McCrea	Mar. 26, 1859	Boom master	Springtown	May 15, 1880	25 00	a month	Employed about three months during season of navigation.
Patrick Barry	" 27, 1858	Slide master	High Falls	Mar. 10, 1888	1 50	a day	Employed four months during season of navigation. Oversees repairs in winter.
Duncan McLaren	Jan. 7, 1860	Deputy slide master	Portage du Fort	Sept. 7, 1881	456 25	a year	" "
N. Rochon	Apr. 2, 1879	"	Black River	Mar. 1, 1900	480 00	"	" "
Wm. Selkirk	May 9, 1848	"	Lower Petawawa	Jan. 19, 1900	2 00	a day	" "
J. R. Jennings	Apr. 28, 1843	"	Upper Petawawa	June 2, 1905	2 00	"	
Wm. Thompson	May 3, 1843	"	Mountain	Sept. 2, 1879	1 25	"	" 6 months "
S. Moorhead	" 3, 1861	"	Calumet	Mar. 1, 1901	1 25	"	" 6 to 7 months "
John Mullin	July 27, 1851	"	Coulonge	Apr. 10, 1899	1 50	"	" 4 months "
T. Costello	June 13, 1851	"	Des Joachims	Mar. 1, 1904	300 00	a year	" " "
J. F. McGuire	Dec. 16, 1842	"	Dumoine	May 1, 1897	2 00	a day	Employed three months during season of nav. Will inspect works when required.
Jas. Carey	July 6, 1850	In charge	Cedar Lake Dam	Apr. 1, 1901	2 00	"	
J. Malbœuf	Nov. 13, 1844	Deputy slide master	Crooked Chute	" 3, 1905	2 00	"	
A. H. Johnson	" 28, 1839	"	Chenaux	——, 1865	2 50	"	Paid during season of navigation, seven months.
Newcastle District.							
W. T. Junkin	Nov. 2, 1867	Slide master	Fenelon Falls	Nov. 15, 1896	100 00	a year	Receives $360 a year as lock master from Dept. of Railways and Canals.
J. G. Bates		"	Burleigh Falls	Feb. 6, 1907	100 00	"	" "
Richelieu District.							
C. Choquette	Nov. 25, 1850	Boom master	Beloeil Station	July 26, 1897	100 00	"	
Burlington Channel Swing Bridge.							
Wm. Omand	July 6, 1837	Bridge attendant	Burlington	Sept. 19, 1896	950 00	"	
W. Hopkins	June 4, 1846	Bridge assistant	"	July 1, 1902	1 65	a day	Employed nine months.

* Appointed accountant, October 4, 1904.

OFFICIALS EMPLOYED ON THE SLIDES AND BOOMS.

STATEMENT showing the Names, Dates of Appointment, Salaries, &c.—*Continued.*

Name.	Date of Birth.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
Burlington Channel Swing Bridge.—Continued.					$ cts.	
H. Lampman	Dec. 14, 1863.	Bridge assistant	Burlington	Sept. 8, 1902.	1 65 "	Employed nine months.
Jas. Eustice	Feb. 27, 1872	"	"	" 19, 1896.	1 50 "	"
Yamaska Lock.						
O. Mineau	July 4, 1844.	Lock keeper	Yamaska	" 1, 1885.	75 00 a month.	"
H. Lambert	Aug. 20, 1844.	"	"	July 1, 1897.	40 00 "	"
Rivière du Lièvre Lock.						
Hugh R. Gorman	Sept. 20, 1842.	Lock master	Rivière du Lièvre	Apr. 15, 1897.	180 00 a year.	
Charles Brazeau	Dec. 23, 1862.	Labourer	"	Mar. 3, 1902.	35 00 a month.	Employed eight months.
Rivière Saint-Louis, Feeder.						
Julien Monpetit	Mar. 4, 1866.	Gate keeper	Rivière St. Louis	May 11, 1903	10 00 a month.	

JOS. VINCENT.

NAMES

OF

PERSONS EMPLOYED ON THE VARIOUS GRAVING DOCKS

ON MARCH 31, 1908

WITH

DATES OF APPOINTMENT, SALARIES, ETC.

GRAVING DOCK EMPLOYEES.

STATEMENT showing the names, Dates of Appointment, Salaries, &c., of persons employed on the various Graving Docks, March 31, 1908.

Name.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
Esquimalt Graving Dock, British Columbia.				$ cts.	
J. A. Gould	Dockmaster	Esquimalt	June 30, 1906	133 33 a month	
John Jeffcott	Engineer	"	Jan. 4, 1901	110 00 "	
F. N. Jones	Assistant engineer	"	" 8, 1901	85 00 "	
A. D. Grieve	Carpenter	"	Dec. 1, 1887	85 00 "	
J. A. Maltravers	Labourer	"	July 1, 1906	50 00 "	
J. Stock	"	"	" 1, 1894	50 00 "	
Chas. Jordan	Stoker	"	" 1, 1901	60 00 "	
G. Springer	"	"	Apr. 1, 1903	60 00 "	
J. Young	Night watchman	"	June 1, 1903	50 00 "	
Lévis Graving Dock.					
Alf. Sampson	Dockmaster	Lévis	Feb. 15, 1900	1,750 00 a year	
W. McDougal	Mechanical engineer	"	June 1, 1888	75 00 a month	
T. Després	Asst. mechanical engineer	"	July 21, 1901	60 00 "	
Casimir Bourassa	Fireman	"	Jan. 15, 1907	40 00 "	
Kingston Graving Dock.					
F. S. Rees	Dockmaster	Kingston	Apr. 1, 1897	1,400 00 a year	
James Gillie	1st engineer	"	Nov. 1, 1905	80 00 a month	
Wm. Geoghegan	Fireman	"	" 1, 1892	50 00 "	
C. Staley	Watchman	"	" 1, 1892	50 00 "	

JOS. VINCENT.

LIST

OF

Engineers, Enginemen, Firemen and Caretakers

EMPLOYED IN THE

PUBLIC BUILDINGS THROUGHOUT THE DOMINION ON MARCH 31, 1908

DATES OF APPOINTMENT, SALARIES, ETC.

ENGINEERS AND CARETAKERS, PUBLIC BUILDINGS.

STATEMENT showing the Names, &c., of the Engineers, Enginemen, Firemen, Caretakers, Hoist Attendants and Watchmen employed at Dominion Public Buildings on March 31, 1908.

Place.	Building.	Name.	Date of Birth.	Position.	Date of Appointment.	Monthly Salary.	Time Employed each year.	Yearly Salary.
						$ cts.		$ cts.
Amherst.. N.S.	Post office	J. H. Chapman	Jan. 3, 1846	Caretaker	Sept. 1, 1901	33 33	12 months	400 00
Antigonish "	Public building	J. C. Fraser	May 31, 1847	"	Oct. 1, 1907	33 33	12 "	400 00
Annapolis "	Post office and custom house	John McKay	Oct. 26, 1847	"	April 1, 1891	33 33	12 "	400 00
Arichat "	Public building	Mrs. A. DeRooch	June 30, 1868	"	May 5, 1905	12 50	12 "	150 00
Baddeck "	"	D. F. McKenzie	May 20, 1848	"	Jan. 21, 1899	20 83	12 "	250 00
Canso "	"	R. Sutherland	Dec. 23, 1855	"	Oct. 12, 1907	29 15	12 "	350 00
Dartmouth "	"	I. C. Henley	Dec. 11, 1846	"	May 22, 1894	20 83	12 "	250 00
Digby "	"	F. Dennison	Nov. 8, 1841	"	Mar. 14, 1902	33 33	12 "	400 00
Guysborough "	"	W. G. Hadley	" 29, 1844	"	May 2, 1906	4 16	12 "	50 00
Halifax "	Dominion building	Richard Power	Aug. 15, 1834	Engineer	Oct. 1, 1871	62 50	12 "	750 00
" "	"	J. DeYoung	Dec. 8, 1860	Fireman	Nov. 28, 1904	50 00	12 "	600 00
" "	"	J. F. Sullivan	April 16, 1866	Caretaker	July 1, 1892	16 60	12 "	200 00
" "	"	J. Delaney	May, 1848	Watchman	Jan. 6, 1906	39 00	8 "	468 00
" "	Drill hall	John Crowell	Feb. 26, 1852	Engineer	Dec. 13, 1901	50 00	12 "	600 00
" "	Armouries	R. Morrison	Mar. 26, 1857	Fireman	Mar. 4, 1903	50 00	12 "	600 00
" "	Examining warehouse	M. O'Neil	Dec. 30, 1850	Caretaker	Oct. 1, 1897	37 50	12 "	450 00
" "	Immigrant building	John Oxley	April 17, 1856	Fireman	Feb. 2, 1897	55 00	12 "	660 00
" "	New custom house	J. Burns	Dec. 3, 1857	Engineer	Jan. 28, 1907	60 00	12 "	720 00
" "	" "	G. Seheg	April 21, 1854	Fireman	April 26, 1907	50 00	12 "	600 00
" "	" "	F. Warner	Oct. 8, 1860	"	May 1, 1907	37 52	12 "	450 00
Inverness "	Public building	J. R. McLennan	Jan. 22, 1857	Caretaker	Mar. 20, 1908	33 33	12 "	400 00
Kentville "	"	W. Hiltz	April 30, 1864	"	Nov. 14, 1900	33 33	12 "	400 00
Liverpool "	"	James Clements	June 5, 1835	"	June 27, 1900	33 33	12 "	400 00
Lunenburg "	"	J. E. Hebb	Nov. 3, 1833	"	" 7, 1895	25 00	12 "	300 00
New Glasgow "	Post office	J. A. Mutch	Dec. 13, 1840	"	Oct. 3, 1901	33 33	12 "	400 00
North Sydney "	Public building	Alex. Green	July 16, 1825	"	" 31, 1897	33 33	12 "	400 00
Pictou "	Post office and custom house	Jas. Arbuckle	Feb. 18, 1836	"	Dec. 20, 1896	11 66	12 "	500 00
Springhill "	Post office	J. A. Watt	Sept. 5, 1849	"	" 1, 1903	33 33	12 "	400 00
Sydney Mines "	Public building	C. McMillan	Nov. 25, 1857	"	Jan. 19, 1905	33 33	12 "	400 00
Sydney South "	Post office and custom house	Mrs. M. Keefe	Jan. 4, 1850	"	" 13, 1904	33 33	12 "	400 00
Truro "	" "	Alex. P. Smith	May 17, 1837	"	April 1, 1897	33 33	12 "	400 00
Windsor[1] "	Post office	J. A. Mosher	Nov. 16, 1841	"	Feb. 13, 1899	33 33	12 "	400 00
Yarmouth "	Public building	W. H. Whelan	Dec. 23, 1841	"	Mar. 1, 1900	33 33	12 "	400 00

Charlottetown	P.E.I.	Dominion building	A. McKenzie	May.	12, 1856	" & engineer	Nov.	1, 1896	45 00	12	"	540 00
"	"	"	E. Cameron	Nov.	2, 1853	Messenger	"	15, 1906	41 67	12	"	500 00
"	"	"	M. A. Allan	Aug.	1, 1855	"	Jan.	24, 1898	50 00	12	"	600 00
"	"	"	P. McKenna	Aug.	4, 1841	Watchman	May	13, 1907	50 00	12	"	600 00
Montague	"	Public building	H. L. Peardon	April	13, 1885	Caretaker	Aug.	27, 1906	13 33	12	"	160 00
Souris	"	"	Thos. Shea	Aug.	11, 1850	"	Dec.	8, 1906	29 16	12	"	350 00
Summerside	"	Dominion building	A. McSween	Sept.	25, 1835	"	Sept.	1, 1897	33 33	12	"	400 00
Bathurst	N.B.	Post office	J. H. Doucet	July	16, 1846	"	Mar.	26, 1906	33 33	12	"	400 00
Campbellton	"	Public building	W. Storey	Sept.	15, 1863	"	Sept.	13, 1907	33 33	12	"	400 00
Chatham	N.B.	Post office	C. Johnston	May	18, 1856	Caretaker	Mar.	27, 1895	25 00	12	"	300 00
Carleton, St. John	"	"	J. S. Clark	Mar.	12, 1860	"	Oct.	28, 1905	8 33	12	"	100 00
Dalhousie	"	"	Wm. Gould	Jan.	1, 1853	"	Nov.	26, 1890	33 33	12	"	400 00
Fredericton	"	"	L. Yarxa	Dec.	18, 1843	"	July	1, 1900	33 33	12	"	400 00
Marysville	"	"	G. W. Foster	Feb.	2, 1835	"	Dec.	23, 1903	12 50	12	"	150 00
Moncton	"	"	E. B. Hicks	Jan.	11, 1832	"	Jan.	11, 1886	33 33	12	"	400 00
Newcastle	"	"	Patrick Keating	Mar.	13, 1840	"	Oct.	23, 1886	33 33	12	"	400 00
Richibucto	"	"	J. Murray	Aug.	16, 1839	"	Feb.	1, 1904	33 33	12	"	400 00
St. John	"	Custom House	Neil J. Morrison	July	25, 1858	Eng. & caretaker	Apr.	27, 1894	60 00	12	"	720 00
"	"	"	Christopher White	Nov.	20, 1844	Fireman	Nov.	9, 1885	50 00	12	"	600 00
"	"	"	James A. Paul	Aug.	1, 1837	Caretaker	Oct.	13, 1891	50 00	12	"	600 00
"	"	Post office	James Wolfe	Mar.	10, 1850	Engineer	Dec.	1, 1893	55 00	12	"	660 00
"	"	"	Edward Haney	Feb.	22, 1849	Hoist attendant	Nov.	27, 1882	50 00	12	"	600 00
"	"	"	A. E. Thael	May	14, 1845	Caretaker	"	6, 1907	50 00	12	"	600 00
St. Stephen	"	"	Samuel Topping	Apr.	2, 1839	"	May	25, 1887	41 66	12	"	500 00
Sussex	"	"	Mrs. N. Dryden	June	21, 1840	"	Mar.	26, 1901	25 00	12	"	300 00
Woodstock	"	"	Charles Trafton	Jan.	20, 1839	"	May	1, 1897	33 33	12	"	400 00
"	"	Armoury	A. W. Field	Mar.	25, 1872	Fireman	Oct.	11, 1906	50 00	12	"	600 00
Acton Vale	P.Q.	Post office	V. Lapointe	Dec.	27, 1859	Caretaker	Jan.	3, 1906	33 33	12	"	400 00
Aylmer	"	"	A. Bourgeau	Jan.	23, 1870	"	Apr.	9, 1904	8 33	12	"	100 00
Buckingham	"	"	T. F. Bisson	May	23, 1848	"	Feb.	3, 1903	10 00	12	"	120 00
Chicoutimi	"	Public building	G. A. Blais	Sept.	24, 1870	"	Dec.	4, 1907	33 33	12	"	400 00
Coaticook	"	"	Israel Baldwin	Nov.	16, 1839	"	June	17, 1889	33 33	12	"	400 00
Drummondville	"	"	A. Paré	Apr.	27, 1842	"	"	5, 1902	33 33	12	"	400 00
Farnham	"	Post office	J. Bélanger	Jan.	19, 1867	"	Jan.	30, 1906	25 00	12	"	300 00
Fraserville	"	"	W. D. Raymond	"	7, 1876	"	Apr.	14, 1905	33 33	12	"	400 00
Granby	"	Public building	J. A. Beauchemin	May	1, 1862	"	May	12, 1903	25 00	12	"	300 00
Hochelaga	"	Post office	J. H. Brown	Oct.	7, 1851	"	Mar.	27, 1902	16 66	12	"	200 00
Hull	"	"	J. T. Madore	Dec.	1, 1843	"	"	8, 1900	12 50	12	"	150 00
Iberville	"	"	A. Courtois	Jan.	20, 1869	"	May	7, 1907	40 00	12	"	480 00
Joliette	"	"	A. Ratel	Dec.	29, 1845	"	Sept.	1, 1897	33 33	12	"	400 00
Lachine	"	"	P. O. Robert	Sept.	7, 1846	"	Jan.	26, 1899	8 33	12	"	100 00
Laprairie	"	"	Jos. Brisson	Nov.	11, 1869	"	Nov.	22, 1901	12 50	12	"	150 00
L'Assomption	"	"	E. Arbour	Dec.	8, 1856	"	July	1, 1904	20 00	12	"	240 00
Levis	"	"	C. Lamontagne	Dec.	28, 1850	"	Mar.	17, 1908	33 33	12	"	400 00
Longueil	"	"	F. X. Maillé	May	12, 1856	"	Mar.	16, 1906	25 00	12	"	300 00
Montreal	"	Dominion building	J. T. Murphy	"	6, 1865	Foreman engin'r	"	2, 1903	108 33	12	"	1,300 00
"	"	"	Ed. Lanctot	Apr.	14, 1857	Caretaker	Dec.	3, 1898	41 67	12	"	500 00
"	"	Examining warehouse	M. Boyer	Feb.	18, 1848	Fireman	Mar.	4, 1882	60 00	12	"	720 00
"	"	"	Art. Lesieur	June	22, 1868	Hoist attendant	Apr.	8, 1905	45 00	12	"	540 00
"	"	"	Jos. Forgues	May	15, 1871	Fireman	Nov.	2, 1904	50 00	12	"	600 00

STATEMENT showing the Names, &c., of the Engineers, Firemen, Caretakers, Hoist Attendants and Watchmen employed at Dominion Public Buildings on March 31, 1908.—*Continued.*

Place.	Building.	Name.	Date of Birth.	Position.	Date of Appointment.	Monthly Salary.	Time Employed each year.	Yearly Salary.
						$ cts.		$ cts.
Montreal	Examining warehouse	Jos. Langevin	Mar. 10, 1850	Fireman	Oct. 18, 1904	50 00	12 months	600 00
"	"	A. Nuttall	July 15, 1872	Electrician	June 1, 1905	2 25	per day	700 00
"	"	M. Fitzgerald		Hoist attendant.	Jan. 31, 1907	60 00	12 months	720 00
"	"	J. B. Desjardins		Cleaner	" 26, 1907	45 00	12 "	540 00
"	"	Samuel Lanctot	June 28, 1885	"	Nov. 23, 1905	45 00	12 "	540 00
"	"	P. Prudhomme	Mar. 7, 1854	Hoist attendant.	Mar. 19, 1906	50 00	12 "	600 00
"	"	R. Barthe	July 12, 1863	"	May 1, 1906	50 00	12 "	600 00
"	"	G. Labelle	May 14, 1871	"	Sept. 12, 1904	50 00	12 "	600 00
"	"	S. McGarry	June 15, 1873	"	" 12, 1904	50 00	12 "	600 00
"	"	J. Neville	Mar. 18, 1870	"	" 12, 1904	50 00	12 "	600 00
"	"	A. Marchand	Sept. 18, 1849	"	Dec. 2, 1888	50 00	12 "	600 00
"	"	A. Drouin	June 14, 1868	"	Nov 28, 1904	50 00	12 "	600 00
"	"	Ad. Desjardins	Sept. 3, 1859	Cleaner	June 30, 1905	15 00	12 "	540 00
"	"	F. Nadon	June 15, 1847	"	Dec. 15, 1902	48 00	12 "	576 00
"	Post office	F. Green	Oct. 4, 1837	Engineer	Jan. 1, 1885	60 00	12 "	720 00
"	"	A. Langevin	May 12, 1885	Asst. engineer	April 2, 1907	50 00	12 "	600 00
"	"	L. D. Thibault	Jan. 28, 1863	Electrician	Dec. 15, 1905	70 00	12 "	840 00
"	"	F. X. Lefebvre	Dec. 13, 1859	Asst. electrician.	June 28, 1905	65 00	12 "	780 00
"	"	Osias Renard	June 14, 1869	Night hoist attdt	Feb. 2, 1907	2 00	per day 12 m.	720 00
"	"	I. Trudeau	Jan. 22, 1863	Caretaker	Oct. 1, 1902	50 00	12 months	600 00
"	"	Oscar Renaud	Feb. 19, 1862	Elevator man	Sept. 10, 1898	50 00	12 "	600 00
"	"	Art. Forget	July 15, 1867	"	Dec. 15, 1893	50 00	12 "	600 00
"	"	L. Brault	Dec. 29, 1854	"	Sept. 1, 1901	50 00	12 "	600 00
"	"	A. Bourassa	June 1, 1857	Freight hoist att.	Aug. 4, 1893	50 00	12 "	600 00
"	"	C. Berthiaume	Nov. 8, 1870	Night watchman	May 5, 1906	50 00	12 "	600 00
"	"	O. de Laudrantaye		Pass. hoist att	Apr. 26, 1906	50 00	12 "	600 00
"	"	C. Vadeboncoeur	May 17, 1842	Freight hoist att.	Feb. 6, 1864	50 00	12 "	600 00
"	"	Alf. Trudeau	Oct. 22, 1875	Messenger		50 00	12 "	600 00
"	"	J. Dutrisac	Feb. 2, 1863	Messenger	Dec. 15, 1893	2 00	per day 12 m.	730 00
"	" , govt. B	J. O. Drouin	Dec. ., 1837	Messenger	Apr. 12, 1907	1 50	per day 12 m.	548 00
"	Inland revenue	Louis St. Jean	Sept. 17, 1840	Firemen	Dec. 1, 1892	50 00	12 months	600 00
"	"	Thos. Gauthier	July 10, 1865	Cleaner	Jan. 14, 1908	45 00	12 "	540 00

"	"	Custom house	C. Daudelin	June	19, 1843	Caretaker	July	16, 1892	37	50	12	"	450 00
"	"	"	H. Valiquette	Dec.	30, 1871	Carpenter	Feb.	1, 1903	65	00	12	"	780 00
"	"	"	G. Flannigan	May	23, 1862	Electrician	Sept.	13, 1906	65	00	12	"	780 00
"	"	"	J. Harrington	Mar.	29, 1862	Asst. electrician	Nov.	12, 1905	2	00	per day	12 m.	720 00
"	"	" and ex. warch.	B. Lajeunesse	Nov.	20, 1861	Fireman	Nov.	23, 1896	50	00	12	months	600 00
"	"	"	M. Murphy	Jan.	28, 1868	Night fireman			45	00	8	"	360 00
"	"	Drill hall and armoury	J. Gagné	Apr.	20, 1867	Engineman	Feb.	14, 1899	50	00	12	"	600 00
"	"	Drill hall	A. Crochetiere	June	24, 1884	Fireman	Nov.	1, 1904	50	00	12	"	600 00
Montmagny	"	Public building	C. Normand	Mar.	11, 1846	Caretaker	Oct.	1, 1907	33	33	12	"	400 00
Nicolet	"	"	U. Papillon	"	16, 1843	"	Nov.	8, 1907	43	33	12	"	520 00
Nonimingue	"	Immigration building	T. A. Christin	May	22, 1857	"	Mar.	20, 1908	25	00	12	"	300 00
Quebec	"	Examining warehouse	D. P. Kennedy	Feb.	9, 1865	Engineer	Nov.	1, 1904	75	00	12	"	900 00
"	"	"	J. G. McLaughlin	Nov.	15, 1880	Fireman	July	4, 1906	53	33	12	"	640 00
"	"	Cullers office	James O'Neil	Aug.	15, 1861	"	Aug.	1, 1894	45	00	12	"	540 00
"	"	Custom office	John R. Mountain	Nov.	1, 1848	"	Nov.	10, 1888	45	00	12	"	540 00
"	"	Post office	J. Roy	Feb.	25, 1836	Caretaker	Sept.	1, 1897	58	33	12	"	700 00
"	"	"	F. J. Cooper	July	8, 1858	Fireman	June	25, 1895	60	00	12	"	720 00
"	St. Sauveur	"	C. Turcotte	Apr.	14, 1866	Caretaker	Jan.	8, 1907	10	00	12	"	120 00
"	"	"	J. D. Villeneuve			Messenger	Apr.	17, 1907	50	00	12	"	600 00
"	"	"	Alf. Landeau			Freight hoist			50	00	12	"	600 00
"	"	Governor General Quarters	M. Lewis	May	6, 1871	Caretaker	Sept.	1, 1905	1	50	per day	12 m.	547 50
Peribonka	"	Immigration building	E. Roy	Dec.	14, 1877	"	Oct.	1, 1902	25	00	12	months	300 00
Roberval	"	"	G. Audet	Nov.	18, 1849	"	May	31, 1907	25	00	12	"	300 00
Rimouski	"	Post office	A. Lepage	Feb.	7, 1866	"	Jan.	1, 1901	12	50	12	"	150 00
Richmond	"	Public building	H. Desmarais	July	14, 1869	"	May	7, 1898	33	33	12	"	400 00
Sherbrooke	"	"	O. Desève	Aug.	6, 1848	"	Apr.	2, 1898	33	33	12	"	400 00
Sorel	"	Post office	C. Robitaille	Jan.	22, 1848	"	Sept.	1, 1897	40	00	12	"	480 00
Saint Henri	"	"	A. C. A. Bissonnette	May	25, 1858	"	Mar.	4, 1895					
Saint Hyacinthe	"	Public building	J. Girouard	Sept.	16, 1838	"	Aug.	2, 1905	43	33	12	"	520 00
"	"	Inland revenue	E. Clapin	Apr.	9, 1844	"	July	19, 1904	33	33	12	"	400 00
"	"	Drill hall	L. Langelier	Sept.	10, 1841	Fireman	Sept.	17, 1907	50	00	12	"	600 00
Saint Johns	"	Post office	L. Forrant	Jan.	21, 1849	Caretaker	Apr.	14, 1897	29	16	12	"	350 00
Saint Jérôme	"	Public building	J. Savard	Oct.	24, 1859	"	Sept.	1, 1900	33	33	12	"	400 00
St. Louis du Mile End	"	Post office	M. A. Campeau	Mar.	6, 1846	"	May	28, 1905	33	33	12	"	400 00
Terrebonne	"	Public building	N. Sasseville	Jan.	29, 1844	"	Jan.	2, 1905	25	00	12	"	300 00
Thetford Mines	"	Post office	J. Roussean	Dec.	22, 1859	"	July	1, 1905	12	50	12	"	150 00
Three Rivers	"	Custom house	Ph. Gravelle	June	3, 1828	"	Feb.	1, 1891	25	00	12	"	300 00
"	"	Post office	Mrs. A. Gauthier			"	Jan.	7, 1907	33	33	12	"	400 00
"	"	Drill hall	A. Pothier	Sept.	25, 1867	Firemen	Mar.	20, 1907	50	00	12	"	600 00
Valleyfield	"	Public building	J. B. Laniel	Oct.	20, 1862	"	Feb.	13, 1905	33	33	12	"	400 00
Victoriaville	"	"	G. Beaudet	Feb.	20, 1862	"	Mar.	3, 1904	6	25	12	"	75 00
Alexander	Ont.	"	D. K. McDonald	July	4, 1847	Caretaker	Oct.	17, 1906	41	66	12	"	500 00
Amherstburg	"	Post office	Mrs. R. Elliott	Dec.	28, 1854	"	June	6, 1905	33	33	12	"	400 00
Almonte	"	"	P. Burns	Jan.	28, 1861	"	Sept.	1, 1907	33	33	12	"	400 00
Arnprior	"	Public building	R. B. McCreary	Jan.	11, 1862	"	Mar.	15, 1899	33	33	12	"	400 00
Barrie	"	Post office	E. Sivigny	Mar.	19, 1847	"	May	1, 1903	33	33	12	"	400 00
Brockville	"	"	C. P. Gray	April	28, 1861	"	April	2, 1908	33	33	12	"	400 00
Brantford	"	"	John Squire	April	24, 1842	"	Oct.	27, 1880	50	00	12	"	600 00
Bridgeburg	"	Public building	Wm. Hanna	Aug.	15, 1863	"	"	3, 1905	25	00	12	"	300 00
Bowmanville	"	"	W. W. Allin	Jan.	13, 1850	"	Feb.	10, 1905	33	33	12	"	400 00

STATEMENT showing the Names, &c., of the Engineers, Enginemen, Firemen, Caretakers, Hoist Attendants and Watchmen employed at Dominion Public Buildings on March 31, 1908. — *Continued.*

Place.		Building.	Name.	Date of Birth.	Position.	Date of Appointment.	Monthly Salary.	Time Employed each Year.	Yearly Salary.
							$ cts.		$ cts.
Belleville	Ont.	Post office	S. Haight	Aug. 26, 1857	Caretaker	Jan. 24, 1901	50 00	12 months	600 00
Berlin	"	"	J. Clemens	June 21, 1840	"	May 15, 1900	33 33	12 "	400 00
Brampton	"	"	J. Foster	Sept. 16, 1846	"	Aug. 1, 1906	33 33	12 "	400 00
Carleton Place	"	"	Jas. F. Halfpenny	Apr. 17, 1858	"	May 13, 1892	25 00	12 "	300 00
Chatham	"	"	W. W. Mitchell	May 25, 1848	"	Jan. 7, 1885	41 66	12 "	500 00
"	"	Armoury	T. W. Stephenson	Oct. 9, 1864	Fireman	Oct. 9, 1906	50 00	12 "	600 00
Cornwall	"	Post office	R. Conroy	Nov. 6, 1848	Caretaker &c.	Aprl 1, 1897	33 33	12 "	400 00
Cayuga	"	"	G. A. Gibson	May 29, 1861	"	Sept. 3, 1891	4 16	12 "	50 00
Clinton	"	"	J. Scott	Jan. 21, 1856	"	Feb. 9, 1904	16 66	12 "	200 00
Cobourg	"	"	J. Staples	June 3, 1834	"	Dec. 10, 1906	33 33	12 "	400 00
Deseronto	"	Public building	M. Hart	Jan. 15, 1862	"	July 1, 1903	33 33	12 "	400 00
Dundas	"	"	Wm. Graham	Dec. 5, 1853	"	" 1, 1898	4 16	12 "	50 00
Fort William	"	"	D. J. McCallum	April 5, 1834	"	Sept. 21, 1904	37 50	12 "	450 00
Galt	"	"	T. Barrett	June 17, 1861	"	Aug. 1, 1902	33 33	12 "	400 00
Guelph	"	"	R. McLeod	July 30, 1865	"	May 25, 1901	33 33	12 "	400 00
Goderich	"	" &c.	G. Bissett	April 14, 1851	"	Sept. 1, 1897	33 33	12 "	400 00
Hamilton	"	Dominion building	Alfred Barnard	Dec. 27, 1847	"	Dec. 10, 1894	50 00	12 "	600 00
"	"	"	J. Wigglesworth	Aug. 7, 1863	Fireman	Oct. 1, 1896	50 00	12 "	600 00
"	"	"	Thomas Nicholson	Dec. 17, 1857	Engineer	Mar. 2, 1887	50 00	12 "	600 00
"	"	Inland revenue building	C. Blackman	May 23, 1850	Caretaker	Jan. 9, 1905	12 00	12 "	144 00
Hawkesbury	"	Public building	A. Marleau	Sept. 22, 1857	"	Aug. 7, 1906	33 33	12 "	400 00
Ingersoll	"	"	John McDonald	June 30, 1841	"	Nov. 20, 1900	33 33	12 "	400 00
Kingston	"	Royal Military College	T. Harrison	Aug. 21, 1875	Fireman	May 1, 1902	p. d. 1 50	12 "	547 50
"	"	Armoury	F. Forsythe	Nov. 15, 1866	Engineer	Feb. 11, 1904	50 00	12 "	600 00
"	"	Royal Military College	Wm. Hazlett	May 27, 1874	"	Nov. 20, 1900	75 00	12 "	900 00
"	"	" "	J. Quigley	Oct. 30, 1857	Fireman	June 1, 1903	55 00	12 "	660 00
"	"	" "	M. Redmond	" 2, 1867	"	Jan. 29, 1902	45 00	12 "	540 00
"	"	" "	L. Cochrane	Mar. 1, 1879	Electrician	July 29, 1902	65 00	12 "	780 00
"	"	Post office	Jas. Kehoe	June 21, 1873	Caretaker	May 15, 1905	48 33	12 "	580 00
"	"	Inland revenue building	J. Lawless	1833	"	Feb. 8, 1908	33 33	12 "	400 00
London	"	Custom house	M. Mulkern	Sept. 4, 1837	"	Sept. 18, 1888	50 00	12 "	600 00
"	"	"	Wm. Greer	Oct. 12, 1839	"	Mar. 16, 1884	33 33	12 "	400 00
"	"	Post office	John Price	" 6, 1836	Engineer	Jan. 14, 1884	50 00	12 "	600 00
"	"	"	J. Gilbanks	Dec. 4, 1861	Caretaker	May 31, 1906	33 33	12 "	400 00

"	"	Drill hall	A. Maclean	Nov.	21, 1851	Engineer	Dec.	1, 1904	60 00	12	"	720 00
Lindsay	"	Post office and custom house	Wm. Galbraith	Jan.	8, 1844	Caretaker	Nov.	17, 1893	33 33	12	"	400 00
Napanee	"	" "	Mrs. C. E. Webster	July	12, 1846	"	Oct.	4, 1901	33 33	12	"	400 00
Niagara Falls	"	Public building	R. Gott	"	27, 1855	"	Mar.	28, 1907	33 33	12	"	400 00
Orangeville	"	"	D. McPherson	April	30, 1851	"	July	15, 1900	33 33	12	"	400 00
Orillia	"	"	John Frawley	Mar.	14, 1844	"	Nov.	1, 1898	29 16	12	"	350 00
Oshawa	"	"	A. Brodie	Sept.	28, 1850	"	Dec.	11, 1905	33 33	12	"	400 00
Ottawa	"	Observatory	A. Villeneuve	Mar.	11, 1857	"	"	14, 1904	55 50	12	"	660 00
"	"	"	G. Sparks	Oct.	16, 1858	Engineer	Nov.	1, 1904	65 00	12	"	780 00
Paris	"	Public building	Sam Lee	"	24, 1841	Caretaker	July	7, 1902	33 33	12	"	400 00
Pembroke	"	Inland revenue building	Samuel Hamilton	June	4, 1834	"	Oct.	29, 1890	33 33	12	"	400 00
Peterborough	"	Post office	John Irwin	May	17, 1842	"	Sept.	8, 1887	33 33	12	"	400 00
"	"	Custom house	Wm. Taylor	Nov.	25, 1839	"	Jan.	26, 1899	25 00	12	"	300 00
Petrolea	"	Post office	James Shaw	June	11, 1842	"	Sept.	12, 1904	33 33	12	"	400 00
Pieton	"	Public building	D. Welbanks	Feb.	8, 1850	"	April	11, 1902	33 33	12	"	400 00
Port Arthur	"	"	D. McKenzie	Sept.	12, 1843	"	May	14, 1906	33 33	12	"	400 00
Port Colborne	"	Post office	Wm. Armstrong	"	9, 1846	"	June	11, 1888	25 00	12	"	300 00
Port Hope	"	"	Jos. Curtis	———	—, 1884	"	May	1, 1905	33 33	12	"	400 00
Prescott	"	"	R. Birks	April	6, 1822	"	"	1, 1899	33 33	12	"	400 00
Rat Portage	Ont.	Public Building	Mrs. J. Link	May	10, 1850	"	Dec.	7, 1901	33 33	12	"	400 00
Sandwich	"	"	John McLeod	———	———	"	July	22, 1907	25 00	12	"	300 00
Sarnia	"	"	J. H. Dyble	Aug.	25, 1860	"	Nov.	7, 1903	33 33	12	"	400 00
Smith's Falls	"	"	R. W. Lewis	"	19, 1863	"	Jan.	8, 1896	33 33	12	"	400 00
Stratford	"	Post office, &c.	J. P. Murray	July	29, 1850	Engineer	"	26, 1900	50 00	12	"	600 00
"	"	Public building	J. A. Carey	"	4, 1856	Fireman	"	24, 1907	50 00	12	"	600 00
Sault Ste. Marie	"	"	P. J. Racine	Sept.	25, 1865	Caretaker	Sept.	29, 1905	33 00	12	"	400 00
St. Catharines	"	Armouries	T. Munday	Mar.	20, 1840	Engineer	Feb.	2, 1907	50 00	12	"	600 00
"	"	Post office, &c.	A. Clark	Sept.	14, 1850	Caretaker	Dec.	12, 1904	33 33	12	"	400 00
St. Thomas	"	"	G. Luton	May	25, 1857	"	April	14, 1903	33 33	12	"	400 00
Strathroy	"	Public building	Wm. J. Johnston	"	12, 1840	"	Oct.	25, 1890	33 33	12	"	400 00
Toronto	"	Dominion buildings	H. E. Hamilton	April	14, 1838	Foreman, engin'r	April	10, 1902	100 00	12	"	1,200 00
"	"	Inland revenue building	C. H. Baillie	Sept.	22, 1852	Fireman	Jan.	13, 1891	55 00	12	"	660 00
"	"	Custom house	H. Drinkwine	———	—, 1874	"	Oct.	16, 1906	55 00	12	"	660 00
"	"	"	Ed. Switzer	Oct.	10, 1856	Hoist attendant	Aug.	18, 1901	55 00	12	"	660 00
"	"	"	T. J. Enright	———	—, 1862	Caretaker	Dec.	18, 1906	50 00	12	"	600 00
"	"	Examining warehouse	James Cosgrove	Feb.	10, 1844	Engineer	"	28, 1874	70 00	12	"	840 00
"	"	"	Ed. Appleton	Sept.	26, 1864	Fireman	Sept.	23, 1886	60 00	12	"	720 00
"	"	"	J. Jennings	Sept.	1, 1867	Hoist attendant	May	25, 1907	50 00	12	"	600 00
"	"	"	R. C. Cussack	Mar.	26, 1875	"	Sept.	20, 1907	50 00	12	"	600 00
"	"	"	F. Simpson	Jan.	8, 1859	Watchman	"	1, 1903	50 00	12	"	600 00
"	"	"	Thos. Jones	Nov.	10, 1853	"	April	4, 1902	50 00	12	"	600 00
"	"	"	Wm. Scott	———	—, 1838	"	June	1, 1905	2 00	p. d.		730 00
"	"	Union station	J. Gormally	"	26, 1872	Hoist attendant	Oct.	17, 1901	50 00	12	months	600 00
"	"	"	W. P. Murphy	Sept.	16, 1868	Elevatorman	Sept.	28, 1905	50 00	12	"	600 00
"	"	P. O. station	James Rae	Feb.	17, 1864	Caretaker	Jan.	12, 1904	41 66	12	"	500 00
"	"	Post office	J. Somers	April	8, 1835	Engineer	Oct.	9, 1897	55 00	12	"	660 00
"	"	"	P. Cassidy	May	2, 1862	Fireman	May	8, 1906	55 00	12	"	660 00
"	"	"	T. Letray	———	—, 1858	"	Jan.	10, 1907	55 00	12	"	660 00
"	"	"	W. J. Graham	Mar.	16, 1840	"	Oct.	1, 1896	60 00	12	"	720 00
"	Junction	"	J. Devins	July	18, 1847	Caretaker	Feb.	3, 1905	33 33	12	"	400 00

STATEMENT showing the Names, &c., of the Engineers, Enginemen, Firemen, Caretakers, Hoist Attendants and Watchmen employed at Dominion Public Buildings on March 31, 1908.—*Concluded.*

Place.	Building.	Name.	Date of Birth.	Position.	Date of Appointment.	Monthly Salary.	Time Employed each year.	Yearly Salary.
						$ cts.		$ cts.
Toronto, Ont.	Drill hall	Richard Eyre	Oct. 11, 1849	Fireman	Mar. 25, 1895	55 00	12 months	660 00
" "	"	D. Glionna	Aug. 8, 1867	"	Oct. 1, 1898	70 00	12 "	840 00
" "	"	G. Robins	Sept. 18, 1858	Caretaker	Sept. 1, 1907	55 00	12 "	660 00
Trenton "	Public building	David Allan	May 13, 1844	"	Aug. 31, 1899	33 33	12 "	400 00
Walkerton "	"	Mrs. F. Gibson	Jan. 21, 1861	"	May 12, 1905	33 33	12 "	400 00
Windsor "	Post office	I. Belleperche	Oct. 26, 1848	Engineman	Dec. 21, 1897	50 00	12 "	600 00
" "	"	W. Curtis	Mar. 6, 1844	Caretaker	Nov. 9, 1880	33 33	12 "	400 00
" "	Drill hall	W. Wheeler	Sept. 27, 1874	Engineer	Jan. 9, 1905	50 00	12 "	600 00
Wingham "	Public building	P. Fisher	Dec. 12, 1832	Caretaker	Nov. 19, 1906	16 66	12 "	200 00
Woodstock "	"	Robert Kerr	June 6, 1861	Engineer	Dec. 11, 1901	33 33	12 "	400 00
Brandon Man.	"	T. Giles	Mar. 30, 1843	"	Aug. 1, 1897	65 00	12 "	780 00
Portage-la-Prairie "	"	J. S. Telfer	July 25, 1840	"	July 1, 1904	45 00	12 "	540 00
Winnipeg "	Post office	Jos. Hay	May 4, 1853	Engineman	" 20, 1905	80 00	12 "	960 00
" "	"	Jas. Boggins	July 10, 1857	Fireman	June 27, 1906	65 00	12 "	780 00
Winnipeg "	Post office	Joseph Coutu	May 10, 1843	Hoist attendant	Mar. 16, 1887	55 00	12 "	660 00
" "	"	A. Boiteau	Sept. 23, 1860	Watchman	Apr. 4, 1905	55 00	12 "	660 00
" "	"	P. Johnson	May 31, 1881	Caretaker	Oct. 19, 1904	60 00	12 "	720 00
" "	Custom house	G. K. Williams	Apr. 15, 1862	Fireman	Apr. 4, 1904	45 00	12 "	540 00
" "	Public building	Wm. Johnson	June 14, 1867	Carpenter	Sept. 1, 1906	65 00	12 "	780 00
Calgary Alta.	Post office	J. G. Adamson	May 21, 1772	Caretaker	June 6, 1907	75 00	12 "	900 00
Edmonton "	Land and registry office	R. Wylie	July 7, 1859	"	June 21, 1894	50 00	12 "	600 00
" "	Post office	E. G. Henry	Mar. 30, 1873	"	Mar. 9, 1907	2 00 p.d.	12 "	730 00
Lethbridge "	Public building	D. Pelletier	Aug. 4, 1854	"	Dec. 17, 1905	45 00	12 "	540 00
Red Deer "	Court house	S. M. Bannerman	July 12, 1835	"	July 20, 1905	55 00	12 "	660 00
Moosejaw Sask.	Public building	R. West	Sept. 12, 1855	"	Sept. 21, 1906	50 00	12 "	600 00
Prince Albert "	"	R. D. Robertson	Aug. 18, 1877	"	Jan. 15, 1906	75 00	12 "	900 00
Regina "	Land office	W. J. Gore	July 22, 1863	"	May 6, 1901	50 00	12 "	600 00
" "	"	T. Perkins	.....	"	Sept. 24, 1906	50 00	12 "	600 00
" "	Post office	John Malcolmson	Nov. 9, 1857	"	" 5, 1906	50 00	12 "	600 00
Atlin B.C.	Public building	J. A. Fraser	Jan. 1, 1851	"	June 26, 1901	12 50	12 "	150 00
Kamloops "	Post office	J. R. McNabb	Sept. 6, 1852	"	Sept. 19, 1905	50 00	12 "	600 00
Nanaimo "	Public building	J. Thompson	" 2, 1836	"	May 1, 1897	50 00	12 "	600 00
Nelson "	"	B. B. Smith	" 12, 1845	"	Mar. 9, 1903	50 00	12 "	600 00
New Westminster "	Post office	L. Thornbar	Apr. 4, 1846	"	July 11, 1906	50 00	12 "	600 00
" "	Indian, etc., building	Mrs. M. L. Matheson	Oct. 2, 1870	"	Nov. 5, 1907	56 00	12 "	660 00

Rossland	B.C.	Public building	H. McQuade	Dec. 24, 1851	Caretaker	Aug. 1, 1906	50 00	12 months	600 00
Vancouver	"	"	A. Chisholm	Apr. 18, 1851	"	Oct. 1, 1903	50 00	12 "	600 00
"	"	"	P. Powers	Mar. 21, 1836	Watchman	Feb. 10, 1901	50 00	12 "	600 00
"	"	"	C. F. Bosomworth	Oct. 1, 1848	Asst. caretaker	July 7, 1901	50 00	12 "	600 00
Victoria	"	New Dominion building	Wm. McKay	Dec. 31, 1857	Caretaker	Feb. 4, 1898	50 00	12 "	600 00
"	"	Dominion building	A. Johnson	May 12, 1858	Asst. caretaker	Apr. 1, 1899	60 00	12 "	720 00
"	"	"	T. Campbell	June 21, 1848	Fireman	Oct, 1, 1906	55 00	12 "	660 00
"	"	"	W. Robinson	July 4, 1848	Elevatorman	Sept. 1, 1907	60 00	12 "	720 00
"	"	"	F. T. McIlmoyle	Dec. 24, 1884	"	Aug. 1, 1907	60 00	12 "	720 00
"	"	Old custom house	Geo Lyoll	Feb. 12, 1843	Caretaker	May 8, 1900	60 00	12 "	720 00
Dawson	Y.T.	Post office	E. Lemieux		Nightman		160 00	12 "	1,920 00
"	"	"	J. K. Johnston	Apr. 17, 1883	Caretaker	Oct. 17, 1904	160 00	12 "	1,920 00
"	"	Administration building	C. Ferais	Oct. 7, 1887	Nightman	June 12, 1906	160 00	12 "	1,920 00
"	"	" "	J. Boutin	Oct. 13, 1876	Caretaker	Dec. 1, 1901	160 00	12 "	1,960 00
"	"	" "	Mrs. A. Misner	Sept. 6, 1860	Charwoman	" 1, 1901	150 00	12 "	1,800 00
"	"	Government house	P. P. McDonald	Oct. 8, 1879	Caretaker	" 1, 1905	160 00	12 "	1,920 00
"	"	Police court	J B. Deslauriers	July 12, 1875	"	June 1, 1906	160 00	12 "	1,920 00
"	"	Court house	H. DeVilliers	May 7, 1872	"	May 21, 1902	160 00	12 "	1,920 00
"	"	"	J. E. Deslauriers	Mar. 25, 1873	Nightman	June 1, 1906	160 00	12 "	1,920 00
White Horse	"	Public building	C. J. McLennan	Dec. 22, 1850	Caretaker	Oct. 30, 1902	125 00	12 "	1,500 00

JOS. VINCENT.

OFFICIAL CORRESPONDENCE

DEPARTMENT OF PUBLIC WORKS

FROM

JULY 1, 1867, TO MARCH 31, 1908

OFFICIAL CORRESPONDENCE.

LETTERS received and sent from July 1, 1867, to March 31, 1908.

Year.	Received.	Sent.
1867—From July 1 to December 31	2,075	1,511
1868 " January 1 to December 31	3,498	2,317
1869 " " "	3,448	2,171
1870 " " "	4,961	3,185
1871 " " "	6,268	3,893
1872 " " "	8,333	4,428
1873 " " "	10,072	5,707
1874 " " "	9,800	5,043
1875 " " "	9,006	5,006
1876 " " "	7,971	4,773
1877 " " "	7,517	4,425
1878 " " "	6,886	4,021
1879 " " to October 6	7,186	4,547
1879 " October 7 to December 31	2,033	810
1880 " January 1 "	8,451	4,411
1881 " " "	9,599	5,529
1882 " " "	10,505	5,699
1883 " " "	11,635	6,227
1884 " " "	13,114	6,903
1885 " " "	8,977	5,321
1886 " " "	9,644	5,352
1887 " " to June 30	4,866	2,735
1887 " July 1 " 1888	10,493	6,343
1888 " " " 1889	10,522	7,042
1889 " " " 1890	10,098	7,448
1890 " " " 1891	10,576	7,286
1891 " " " 1892	11,637	6,700
1892 " " " 1893	11,720	6,220
1893 " " " 1894	9,517	6,028
1894 " " " 1895	10,190	5,148
1895 " " " 1896	10,223	5,573
1896 " " " 1897	11,404	5,033
1897 " " " 1898	9,640	5,250
1898 " " " 1899	9,639	4,784
1899 " " " 1900	12,139	5,938
1900 " " " 1901	13,179	6,255
1901 " " " 1902	15,880	5,067
1902 " " " 1903	13,140	6,373
1903 " " " 1904	11,300	5,878
1904 " " " 1905	11,940	6,461
1905 " " " 1906	11,700	6,472
1906 " " to March 31, 1907	9,400	5,085
1907 " April 1 " 1908	14,680	7,469

LETTERS Sent from Chief Engineer's office, from January 1880, to March 31, 1908.

Year.	——	Number.
1880	From January 10 to June 30	418
1880	" July 1 " 1881	1,795
1881	" " " 1882	2,352
1882	" " " 1883	2,651
1883	" " " 1884	3,611
1884	" " " 1885	3,119
1885	" " " 1886	2,867
1886	" " " 1887	3,281
1887	" " " 1888	3,552
1888	" " " 1889	4,229
1889	" " " 1890	3,374
1890	" " " 1891	3,948
1891	" " " 1892	4,009
1892	" " " 1893	4,232
1893	" " " 1894	3,966
1894	" " " 1895	4,603
1895	" " " 1896	4,239
1896	" " " 1897	4,994
1897	" " " 1898	4,696
1898	" " " 1899	5,277
1899	" " " 1900	7,366
1900	" " " 1901	4,341
1901	" " " 1902	6,759
1902	" " " 1903	4,327
1903	" " " 1904	5,295
1904	" " " 1905	5,496
1905	" " " 1906	8,036
1906	" " to March 31, 1907	3,771
1907	" April 1 " 1908	6,456

NOTE.—The letters, including returns, received in the Chief Engineer's office may be estimated at the rate of two received to one sent.

SESSIONAL PAPER No. 19

LETTERS Received and Sent, Chief Architect's office, from January 1, 1880, to March 31, 1908.

——	Received.	Sent.
1880—From January 1 to June 30	.....	1,273
1880 " " " 1881	.....	2,943
1881 " " " 1882	.....	2,859
1882 " " " 1883	3,538	4,600
1883 " " " 1884	3,860	6,004
1884 " " " 1885	4,500	6,718
1885 " " " 1886	6,075	6,450
1886 " " " 1887	6,816	6,380
1887 " " " 1888	6,947	6,870
1888 " " " 1889	6,484	7,667
1889 " " " 1890	7,448	6,578
1890 " " " 1891	.....	7,751
1891 " " " 1892	6,113	4,260
1892 " " " 1893	7,428	6,453
1893 " " " 1894	6,900	4,517
1894 " " " 1895	7,538	5,327
1895 " " " 1896	7,843	5,783
1896 " " " 1897	10,700	8,200
1897 " " " 1898	10,867	8,547
1898 " " " 1899	10,913	8,762
1899 " " " 1900	12,386	9,878
1900 " " " 1901	12,287	9,860
1901 " " " 1902	12,560	10,330
1902 " " " 1903	13,430	11,106
1903 " " " 1904	14,710	15,590
1904 " " " 1905	15,000	14,300
1905 " " " 1906	15,785	14,785
1906 " " to March 31, 1907	13,768	12,087
1907 " April 1 " 1908	17,000	16,340